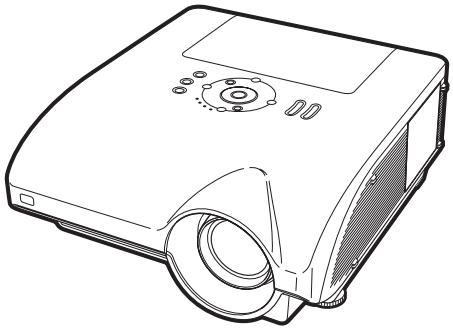
SHARP

SERVICE MANUAL
SERVICE-ANLEITUNG

S35G5XG-PH50X



MULTIMEDIA-PROJECTOR
MULTIMEDIA-PROJEKTOR

MODELS
MODELLE

XG-PH50X
XG-PH50X-NL

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

Im Interesse der Benutzersicherheit (erforderliche Sicherheitsregeln in einigen Ländern) muß das Gerät in seinen Originalzustand gebracht werden. Außerdem dürfen für die spezifizierten Bauteile nur identische Teile verwendet werden.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

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SPECIFICATIONS

Product type	Multimedia Projector
Model	XG-PH50X (standard zoom lens attached)/XG-PH50X-NL (no lens attached)
Video system	NTSC3.58/NTSC4.43/PAL/PAL-M/PAL-N/PAL-60/SECAM/ DTV480I/DTV480P/DTV540P/DTV576I/DTV576P/DTV720P/DTV1035I/DTV1080I
Display method	Single Chip Digital Micromirror Device™ (DMD™) by Texas Instruments
DMD panel	Panel size: 0.7" No. of dots: 786,432 dots (1,024 [H] × 768 [V])
Lens	1.2 × electric zoom/focus lens, F1.8–F2.0, f = 25.6–31.3 mm (standard equipment with XG-PH50X)
Projection lamp	250 W × 2
Component input (INPUT 1)/ output (OUTPUT) signal	15-pin mini D-sub connector Y: 1.0 Vp-p, sync negative, 75 Ω terminated PB: 0.7 Vp-p, 75 Ω terminated PR: 0.7 Vp-p, 75 Ω terminated
Horizontal resolution	750 TV lines (DTV720P)
Component input (INPUT 2) signal	BNC connector Y: 1.0 Vp-p, sync negative, 75 Ω terminated PB: 0.7 Vp-p, 75 Ω terminated PR: 0.7 Vp-p, 75 Ω terminated
RGB input (INPUT 1/2)/ output (OUTPUT) signal	15-pin mini D-sub connector, 5 BNC connector RGB separate/sync on green type analog input: 0–0.7 Vp-p, positive, 75 Ω terminated HORIZONTAL SYNC. SIGNAL: TTL level (positive/negative) VERTICAL SYNC. SIGNAL: Same as above
RGB digital input signal (INPUT 3)	DVI connector (24-pin), RGB (digital), 250 –1,000 mV, 50 Ω (Compatible with HDCP)
Video input signal (INPUT 4)	RCA connector: VIDEO, composite video, 1.0 Vp-p, sync negative, 75 Ω terminated
S-video input signal (INPUT 5)	4-pin mini DIN connector Y (luminance signal): 1.0 Vp-p, sync negative, 75 Ω terminated C (chrominance signal): Burst 0.286 Vp-p, 75 Ω terminated
Audio input signal	ø3.5 mm stereo minijack: AUDIO, 0.5 Vrms, more than 22 kΩ
Audio output signal (AUDIO OUTPUT 1–5)	ø3.5 mm minijack 0.5 Vrms, less than 2.2 kΩ
RS-232C terminal	9-pin mini DIN connector
LAN terminal	8-pin RJ-45 modular connector
Pixel clock	12–230 MHz
Vertical frequency	43–200 Hz
Horizontal frequency	15–126 kHz
Audio output	3.0 W (stereo)
Speaker system	4.5 cm round × 2
Rated voltage	AC 100–240 V
Input current	6.3 A (AC 100 V)–2.6 A (AC 240 V)
Rated frequency	50/60 Hz
Power consumption	630 W (when "Eco Mode" is "OFF")/505 W (when "Eco Mode" is "ON") with AC 100 V 600 W (when "Eco Mode" is "OFF")/485 W (when "Eco Mode" is "ON") with AC 240 V
Power consumption (standby)	0.75 W (AC 100 V) – 1.25 W (AC 240 V) (When "Monitor Out" and "LAN/RS232C" are set to "Disable".)
Heat dissipation	2,370 BTU/hour (when "Eco Mode" is "OFF")/1,900 BTU/hour (when "Eco Mode" is "ON") with AC 100 V 2,260 BTU/hour (when "Eco Mode" is "OFF")/1,825 BTU/hour (when "Eco Mode" is "ON") with AC 240 V
Operating temperature	41°F to 104°F (+5°C to +40°C)
Storage temperature	–4°F to 140°F (–20°C to +60°C)
Cabinet	Plastic
I/R carrier frequency	38 kHz
Dimensions (approx.)	16 $^{5}/_{32}$" × 7 $^{3}/_{32}$" × 18 $^{35}/_{64}$" (410 (W) × 180 (H) × 471 (D) mm) (main body only) 16 $^{5}/_{32}$" × 7 $^{37}/_{64}$" × 18 $^{35}/_{64}$" (410 (W) × 192.1 (H) × 471 (D) mm) (including adjustment foot and projecting parts)
Weight (approx.)	XG-PH50X: 32.7 lbs. (14.8 kg), XG-PH50X-NL: 30.0 lbs. (13.6 kg)
Replacement parts	Lamp unit (AN-PH50LP1/AN-PH50LP2), Remote control (9NK5041808700), Power cord for U.S., Canada, etc. (9NK3090152800), Power cord for Europe, except U.K. (9NK3090152700), Power cord for U.K., Hong Kong and Singapore (9NK3090152900), Power cord for Australia, New Zealand and Oceania (9NK3090152600), RGB cable (9NK3080431000), Remote mouse receiver (9NK3790197000), Cap for the standard zoom lens (9NK3797200400), Projector manual and technical reference CD-ROM (9NK3532094500), Operation manual (9NK5010011800)

As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

IMPORTANT SERVICE SAFETY NOTES (for USA)

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and servicing guidelines as follows:**

WARNING

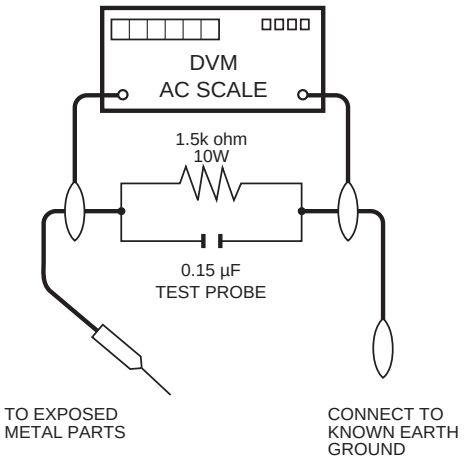
1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

BEFORE RETURNING THE PROJECTOR: (Fire & Shock Hazard)

Before returning the projector to the user, perform the following safety checks:

1. Inspect lead wires are not pinched between the chassis and other metal parts of the projector.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for current leakage in the following manner:

- Plug the AC cord directly into a 120-volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in parallel between all exposed metal cabinet parts and earth ground.
- Use an AC voltmeter with sensitivity of 5000 ohm per volt., or higher, sensitivity to measure the AC voltage drop across the resistor (See Diagram).
- All checks must be repeated with the AC plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these checks.)
  Any reading of 0.3 volts RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in DMD™ Projector have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams. For continued protection, replacement parts must be identical to those used in the original circuit. The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les projecteur à DMD™ présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue.
Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque "⚠" et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques. Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies ou autres accidents.

WARNING: The bimetallic component has the primary conductive side exposed. Be very careful in handling this component when the power is on.

AVERTISSEMENT: La composante bimétallique dispose du conducteur primaire dénudé. Faire attention lors de la manipulation de cette composante sous tension.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ **Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.**

AVERTISSEMENT

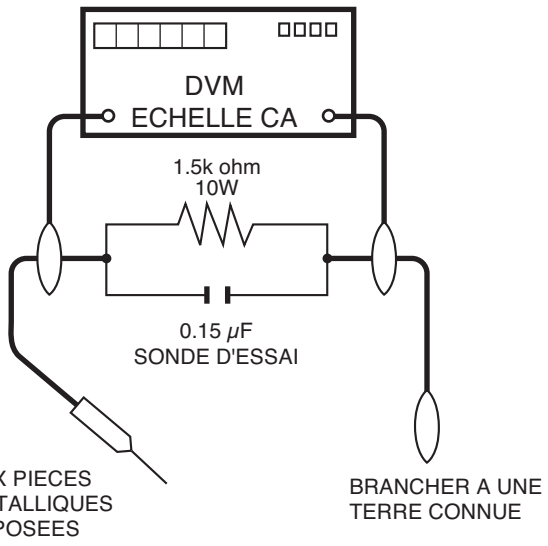
1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.

VERIFICATIONS CONTRE L'INCEN-DIE ET LE CMC ELECTRIQUE

Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

1. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
2. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistance-capacité, les isolateurs mécaniques, etc.
3. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la facon suivante:

- Brancher le cordon d'alimentation directem-ent à une prise de courant de 120V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
- A l'aide de deux fils à pinces, brancher une résistance de 1.5 kΩ 10 watts en parallèle avec un condensateur de 0.15µF en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une conduite électrique ou une prise de terre branchée à la terre.
- Utiliser un voltmètre CA d'une sensibilité d'au moins 5000Ω/V pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)
  Tous les courants mesurés ne doivent pas dépasser 0.5 mA.
  Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseur ACL présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque " ⚠ " et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.
Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

NOTE TO SERVICE PERSONNEL

UV-RADIATION PRECAUTION

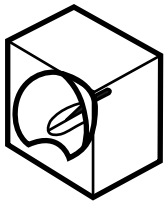
The light source, UHP lamp, in the LCD projector emits small amounts of UV-Radiation.

AVOID DIRECT EYE AND SKIN EXPOSURE.

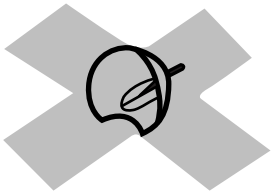
To ensure safety please adhere to the following:

1. Be sure to wear sun-glasses when servicing the projector with the lamp turned “on” and the top enclosure removed.

2. Do not operate the lamp outside of the lamp housing.



3. Do not operate for more than 2 hours with the enclosure removed.



UV-Radiation and Medium Pressure Lamp Precautions

1. Be sure to disconnect the AC plug when replacing the lamp.
2. Allow one hour for the unit to cool down before servicing.
3. Replace only with same type lamp. Type AN-PH50LP1/ AN-PH50LP2 rated 250W.
4. The lamp emits small amounts of UV-Radiation, avoid direct-eye contact.
5. The medium pressure lamp involves a risk of explosion. Be sure to follow installation instructions described below and handle the lamp with care.

NOTE POUR LE PERSONNEL D’ENTRETIEN

PRECAUTION POUR LES RADIATIONS UV

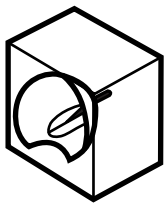
La source de lumière, la lampe UHP, dans le projecteur LCD émet de petites quantités de radiation UV.

EVITEZ TOUTE EXPOSITION DIRECTE DES YEUX ET DE LA PEAU.

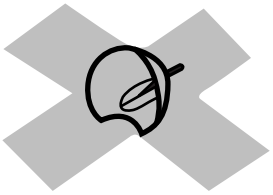
Pour votre sécurité, nous vous prions de respecter les points suivants:

1. Toujours porter des lunettes de soleil lors d’un entretien du projecteur avec la lampe allumée et le haut du coffret retiré.

2. Ne pas faire fonctionner la lampe à l’extérieur du boîtier de lampe.



3. Ne pas faire fonctionner plus de 2 heures avec le coffret retiré.



Précautions pour les radiations UV et la lampe moyenne pression

1. Toujours débrancher la fiche AC lors du remplacement de la lampe.
2. Laisser l’unité refroidir pendant une heure avant de procéder à l’entretien.
3. Ne remplacer qu’avec une lampe du même type. Type AN-PH50LP1/AN-PH50LP2, caractéristique 250W.
4. La lampe émet de petites quantités de radiation UV- éviter tout contact direct avec les yeux.
5. La lampe moyenne pression implique un risque d’explosion. Toujours suivre les instructions d’installation décrites ci-dessous et manipuler la lampe avec soin.

UV-RADIATION PRECAUTION (Continued)

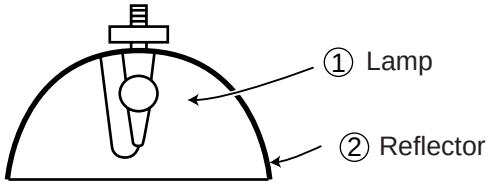
■ Lamp Replacement

Note:

Since the lamp reaches a very high temperature during units operation replacement of the lamp should be done at least one hour after the power has been turned off. (to allow the lamp to cool off.)

Installing the new lamp, make sure not to touch the lamp (bulb) replace the lamp by holding its reflector ②.

[Use original replacement only.]



DANGER ! — Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages at its start.

Since small amounts of UV-radiation are emitted from an opening between the exhaust fans, it is recommended to place the cap of the optional lens on the opening during servicing to avoid eye and skin exposure.

PRECAUTION POUR LES RADIATIONS UV (Suite)

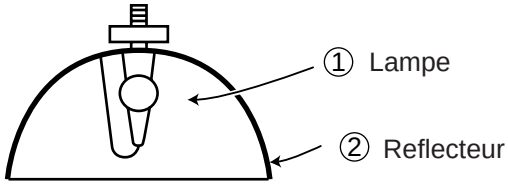
■ Remplacement de la lampe

Remarque:

Comme la lampe devient très chaude pendant le fonctionnement de l'unité, son remplacement ne doit être effectué au moins une heure après avoir coupé l'alimentation (pour permettre à la lampe de refroidir).

En installant la nouvelle lampe, s'assurer de ne pas toucher la lampe (ampoule). Remplacer la lampe en tenant son réflecteur ②.

[N'utiliser qu'un remplacement d'origine.]



DANGER ! — Ne jamais mettre sous tension sans la lampe pour éviter un choc électrique ou des dommages des appareils car le stabilisateur génère de hautes tensions à sa mise en route.

Comme de petites quantités de radiation UV sont émises par une ouverture entre les ventilateurs aspirants, il est recommandé de placer le capuchon de l'optique optionnelle sur l'ouverture pendant l'entretien pour éviter une exposition des yeux et la peau.

WARNING: High brightness light source, do not stare into the beam of light, or view directly. Be especially careful that children do not stare directly in to the beam of light.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO MOISTURE OR WET LOCATIONS.

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT REMOVE SCREWS EXCEPT SPECIFIED USER SERVICE SCREW.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE CABINET.
NO USER-SERVICEABLE PARTS EXCEPT LAMP UNIT.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lighting flash with arrowhead within a triangle is intended to tell the user that parts inside the product are risk of electric shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the manual with the projector.

CAUTION
(FILTER Unit)

8A 250V

For continued protection against a risk of fire, replace only with same type 8A, AC250V fuse. (F301)

AVERTISSEMENT: Source lumineuse de grande intensité. Ne pas fixer le faisceau lumineux ou le regarder directement. Veiller particulièrement à éviter que les enfants ne fixent directement le faisceau lumineux.

AVERTISSEMENT: AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION, NE PAS PLACER CET APPAREIL DANS UN ENDROIT HUMIDE OU MOUILLE.

ATTENTION

RISQUE D'ÉLECTROCUTION. NE PASR ETIRER LES VIS Á L'EXCEPTION DE LA VIS DE REPARATION UTILISATEUR SPECIFIEES

ATTENTION: POUR EVITER TOUT RISQUE D'ELECTROCUTION, NE PAS RETIRER LE CAPOT.
AUCUNE DES PIECES INTERIEURES N'EST REPARABLE PAR L'UTILISATEUR, A L'EXCEPTION DE L'UNITE DE LAMPE. POUR TOUTE REPARATION, S'ADRESSER A UN TECHNICIEN D'ENTRETIEN QUALIFIE.

L'éclair terminé d'une flèche à l'intérieur d'un triangle indique à l'utilisateur que les pi'eces se trouvant dans l'appareil sont susceptibles de provoquer une décharge électrique.

Le point d'exclamation à l'intérieur d'un triangle indique à l'utilisateur que les instructions de fonctionnement et d'entretien sont détaillées dans les documents fournis avec le projecteur.

PRECAUTION
(Unité de Filtre)

8A 250V

Pour une protection continue contre un risques d'incendie, ne remplacer qu'avec un fusible 8A,AC250V du même type. (F301)

Precautions for using lead-free solder

1 Employing lead-free solder
"PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.
Example:

Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder
When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.
As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3 Soldering
As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.
Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.
If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.
When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

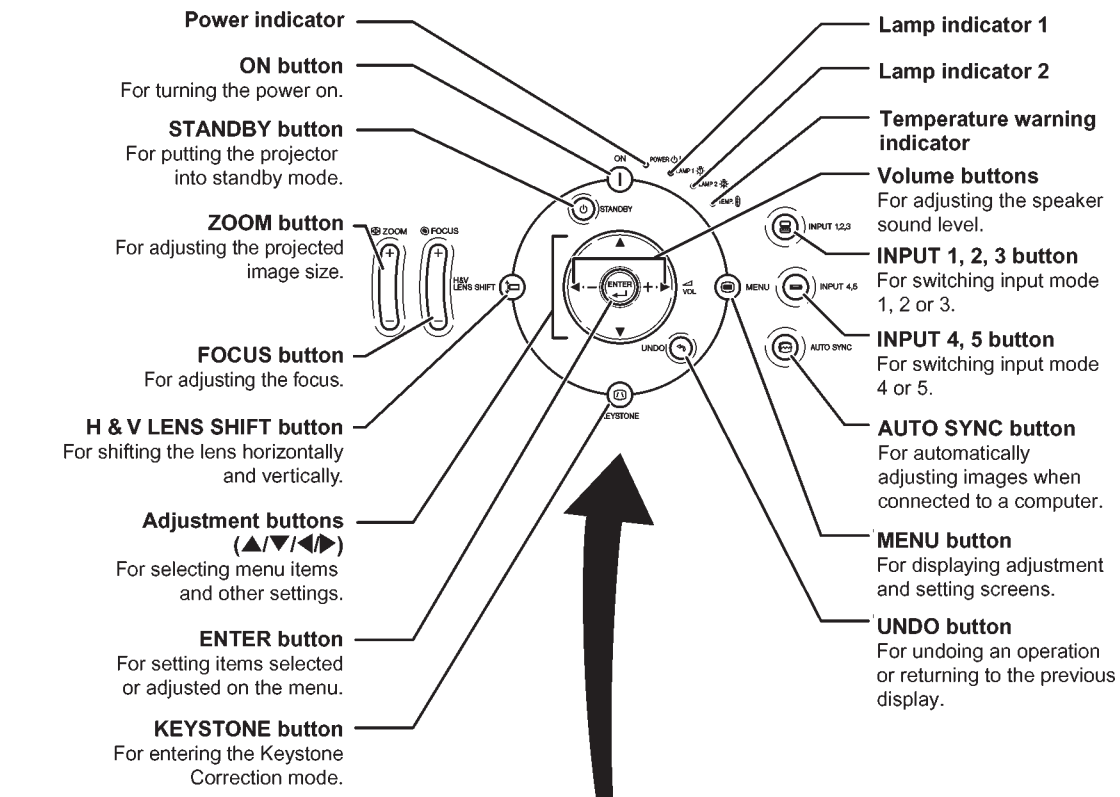
Lead-free wire solder for servicing

Part No.	★	Description	Code
ZHNDAi123250E	J	ϕ0.3mm 250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm 500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm 1kg(1roll)	BM

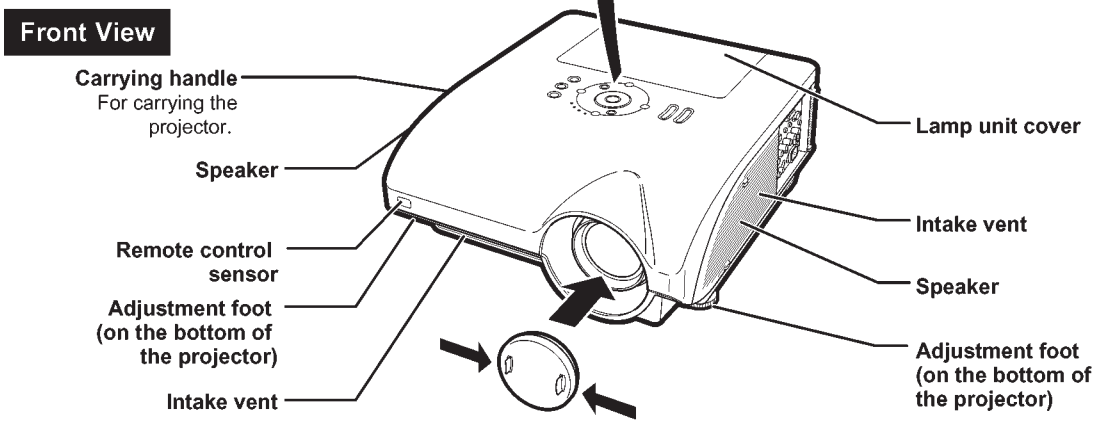
Operation Manual

Projector

Top View



Front View



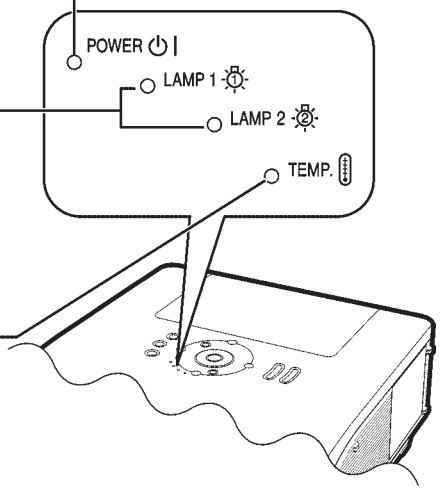
- **Attaching the lens cap**
  Push the lens cap on until it clicks into position.
- **Removing the lens cap**
  Pull the lens cap directly outward.

About the Indicators on the Projector

Power indicator
Red on ··· Normal (Standby)
Green on ··· Normal (Power on)
Red blinks ··· The intake vent cover is open.

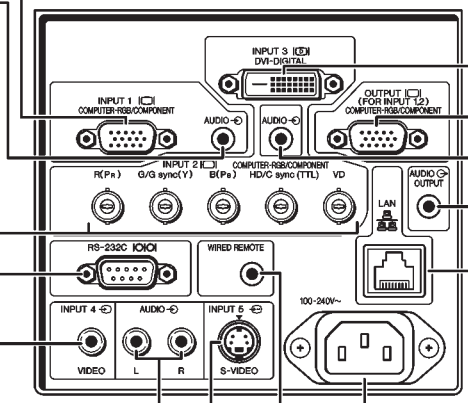
Lamp indicators 1, 2
Green on ··· Normal
Green blinks ··· The lamp is warming up.
Red on ··· The lamp has been shut down abnormally or needs to be changed.

Temperature warning indicator
Off ··· Normal
Red blinks/on ···The internal temperature is abnormally high.



Projector (Side View)

Terminals



INPUT 1 terminal
Terminal for computer RGB and component signals.

AUDIO input (1) terminal
Audio input terminal for INPUT 1.

INPUT 2 terminals
BNC terminals for computer RGB and component signals.

RS-232C terminal
Terminal for controlling the projector using a computer.

INPUT 4 terminal
Terminal for connecting video equipment.

AUDIO input (4, 5) terminal
Shared audio input terminal for INPUT 4 and 5.

INPUT 5 terminal
Terminal for connecting video equipment with an S-video terminal.

WIRED REMOTE terminal
For connecting the remote control to the projector when the signals from the remote control cannot reach the remote control sensor.

INPUT 3 terminal
Terminal for DVI digital RGB and digital component signals.

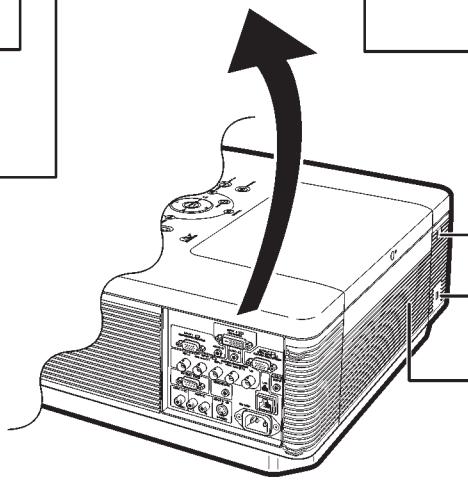
OUTPUT (FOR INPUT 1, 2) terminal
Output terminal for computer RGB and component signals. Shared for INPUT 1 and 2.

AUDIO input (2, 3) terminal
Shared audio input terminal for INPUT 2 and 3.

AUDIO OUTPUT terminal
Audio output terminal shared for INPUT 1–5.

LAN terminal
Terminal for controlling the projector using a computer via network.

AC socket
Connect the supplied Power cord.



Remote control sensor

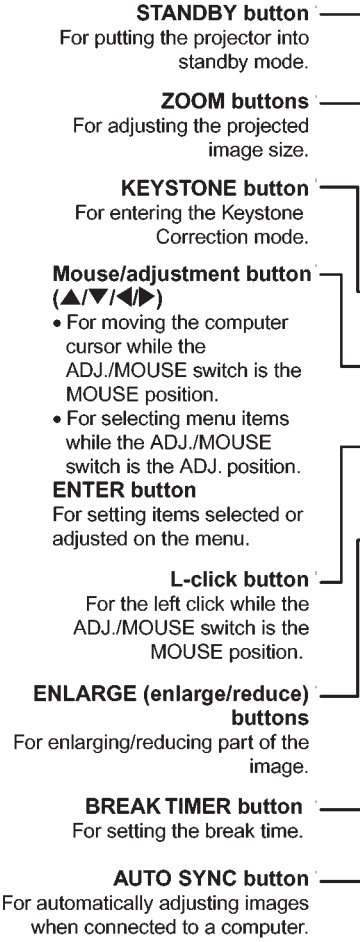
Kensington Security Standard connector

Exhaust vent
The speed and pitch of the cooling fan may change during operation in response to internal temperature changes. This is normal operation and does not indicate a malfunction.

Using the Kensington Lock

- This projector has a Kensington Security Standard connector for use with a Kensington MicroSaver Security System. Refer to the information that came with the system for instructions on how to use it to secure the projector.

Remote Control



FOCUS buttons
For bringing the projected image into focus.

STANDBY button
For putting the projector into standby mode.

ZOOM buttons
For adjusting the projected image size.

KEYSTONE button
For entering the Keystone Correction mode.

Mouse/adjustment button (▲/▼/◀/▶)
- For moving the computer cursor while the ADJ./MOUSE switch is the MOUSE position.
- For selecting menu items while the ADJ./MOUSE switch is the ADJ. position.

ENTER button
For setting items selected or adjusted on the menu.

L-click button
For the left click while the ADJ./MOUSE switch is the MOUSE position.

ENLARGE (enlarge/reduce) buttons
For enlarging/reducing part of the image.

BREAK TIMER button
For setting the break time.

AUTO SYNC button
For automatically adjusting images when connected to a computer.

INPUT 1, 2, 3, 4 and 5 buttons
For switching to the respective input modes.

ON button
For turning the power on.

ADJ./MOUSE switch
For switching the remote control modes.

H & V LENS SHIFT button
For shifting the lens horizontally and vertically.

MENU button
For displaying adjustment and setting screens.

R-click/UNDO button
- For the right click while the ADJ./MOUSE switch is the MOUSE position.
- For undoing an operation or returning to the previous display while the ADJ./MOUSE switch is the ADJ. position.

FREEZE button
For freezing images.

Volume buttons
For adjusting the speaker sound level.

MUTE button
For temporarily turning off the sound.

BLACK SCREEN button
For temporarily display the black screen.

RESIZE button
For switching the screen size.

PICTURE MODE button
For switching the picture mode.

WIRED R/C JACK
For connecting the remote control to the projector when the signals from the remote control cannot reach the remote control sensor.

Note

- All the buttons on the remote control, except the mouse/adjustment button and the ADJ./MOUSE switch, are made of luminous material that is visible in the dark. Visibility will diminish over time. Exposure to light will recharge the luminous buttons.

Usable Range

The remote control can be used to control the projector within the ranges shown in the illustration.

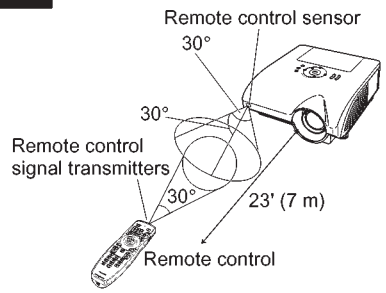
Note

- The signal from the remote control can be reflected off a screen for easy operation. However, the effective distance of the signal may differ depending on the screen material.

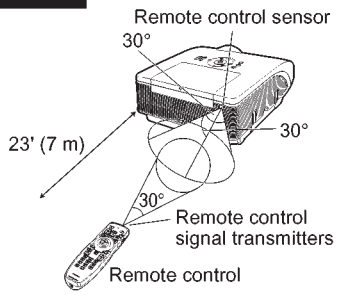
When using the remote control:

- Ensure not to drop, expose to moisture or high temperature.
- The remote control may malfunction under a fluorescent lamp. In this case, move the projector away from the fluorescent lamp.

Front View

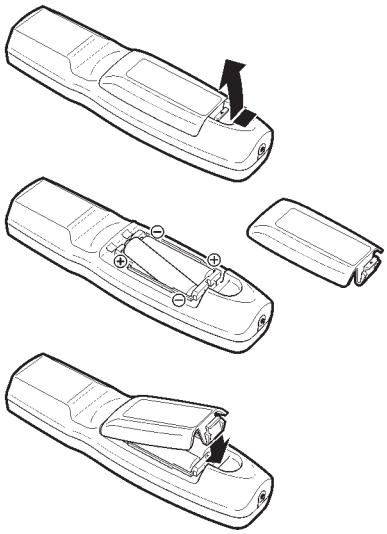


Rear View



Inserting the Batteries

The batteries (two R-6 batteries ("AA" size, UM/SUM-3, HP-7 or similar)) are supplied in the package.



1 Press the tab and lift open the battery cover in the direction of the arrow.

2 Insert the batteries.

- Insert the batteries making sure the polarities correctly match the ⊕ and ⊖ marks inside the battery compartment.

3 Insert the tabs on the end of the battery cover into their slots and press the cover into position.

Incorrect use of the batteries may cause them to leak or explode. Please follow the precautions below.

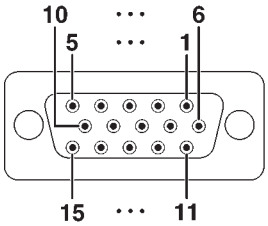
⚠ Caution

- Insert the batteries making sure the polarities correctly match the ⊕ and ⊖ marks inside the battery compartment.
- Batteries of different types have different properties, therefore do not mix batteries of different types.
- Do not mix new and old batteries.
  This may shorten the life of new batteries or may cause old batteries to leak.
- Remove the batteries from the remote control once they have run out, as leaving them in can cause them to leak. Battery fluid from leaked batteries is harmful to skin, therefore ensure to first wipe them and then remove them using a cloth.

- The batteries included with this projector may run down in a short period, depending on how they are kept. Ensure to replace them as soon as possible with new batteries.
- Remove the batteries from the remote control if you will not be using the remote control for a long time.

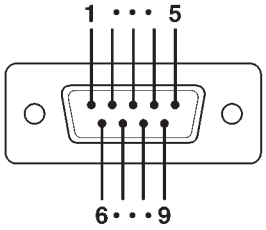
Connection Pin Assignments

RGB Signal Terminal (INPUT 1 and OUTPUT (FOR INPUT 1, 2)): 15-pin mini D-sub female connector



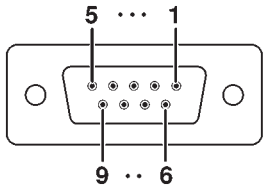
RGB Input	Component Input
1. Video input (red)	1. P_R (C_R)
2. Video input (green/sync on green)	2. Y
3. Video input (blue)	3. P_B (C_B)
4. Not connected	4. Not connected
5. Not connected	5. Not connected
6. Earth (red)	6. Earth (P_R)
7. Earth (green/sync on green)	7. Earth (Y)
8. Earth (blue)	8. Earth (P_B)
9. Not connected	9. Not connected
10. GND	10. Not connected
11. Not connected	11. Not connected
12. Bi-directional data	12. Not connected
13. Horizontal sync signal: TTL level	13. Not connected
14. Vertical sync signal: TTL level	14. Not connected
15. Data clock	15. Not connected

RS-232C Terminal: 9-pin D-sub male connector



Pin No.	Signal	Name	I/O	Reference
1				Not connected
2	RD	Receive Data	Input	Connected to internal circuit
3	SD	Send Data	Output	Connected to internal circuit
4				Not connected
5	SG	Signal Ground		Connected to internal circuit
6				Not connected
7	RS	Request to Send		Connected to CS in internal circuit
8	CS	Clear to Send		Connected to RS in internal circuit
9				Not connected

RS-232C Cable Recommended Connection: 9-pin D-sub female connector



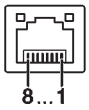
Pin No.	Signal	Pin No.	Signal
1	CD	1	CD
2	RD	2	RD
3	SD	3	SD
4	ER	4	ER
5	SG	5	SG
6	DR	6	DR
7	RS	7	RS
8	CS	8	CS
9	CI	9	CI

Note

• Depending on the controlling device used, it may be necessary to connect Pin 4 and Pin 6 on the controlling device (e.g. computer).

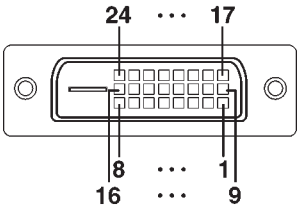
Projector Pin No.	Computer Pin No.
4	4
5	5
6	6

LAN Terminal : 8-pin RJ-45 modular connector



Pin No.	Signal	Pin No.	Signal
1	TX+	5	
2	TX–	6	RX–
3	RX+	7	
4		8	

DVI digital Terminal (INPUT 3)



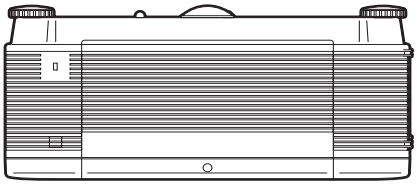
Pin No.	Signal
1	T.M.D.S. Data 2–
2	T.M.D.S. Data 2+
3	T.M.D.S. Data 2 Shield
4	Not connected
5	Not connected
6	DDC Clock
7	DDC Data
8	Not connected
9	T.M.D.S. Data 1–
10	T.M.D.S. Data 1+
11	T.M.D.S. Data 1 Shield
12	Not connected
13	Not connected
14	+5 V Power
15	Ground
16	Hot Plug Detect

Pin No.	Signal
17	T.M.D.S. Data 0–
18	T.M.D.S. Data 0+
19	T.M.D.S. Data 0 Shield
20	Not connected
21	Not connected
22	T.M.D.S. Clock Shield
23	T.M.D.S. Clock+
24	T.M.D.S. Clock–

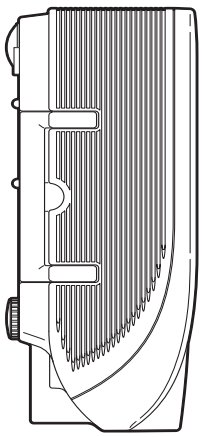
DIMENSIONS

Units: inches (mm)

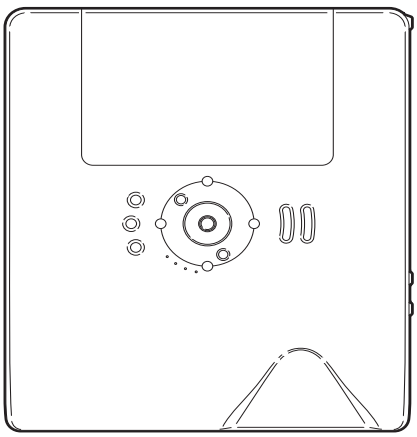
Rear View



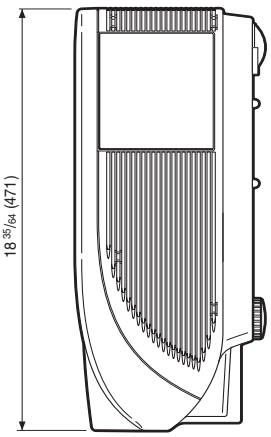
Side View



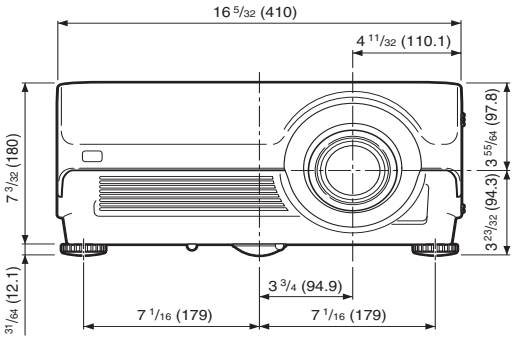
Top View



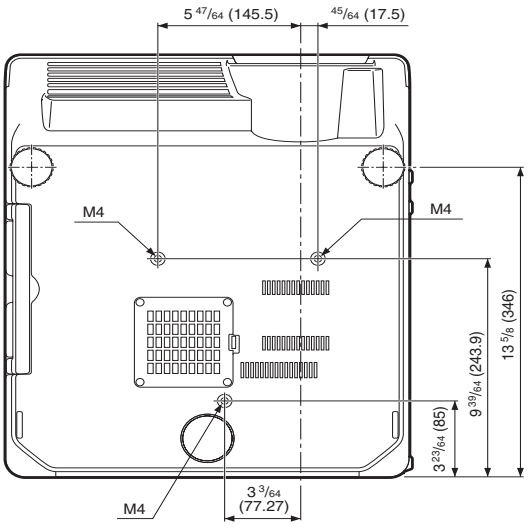
Side View



Front View



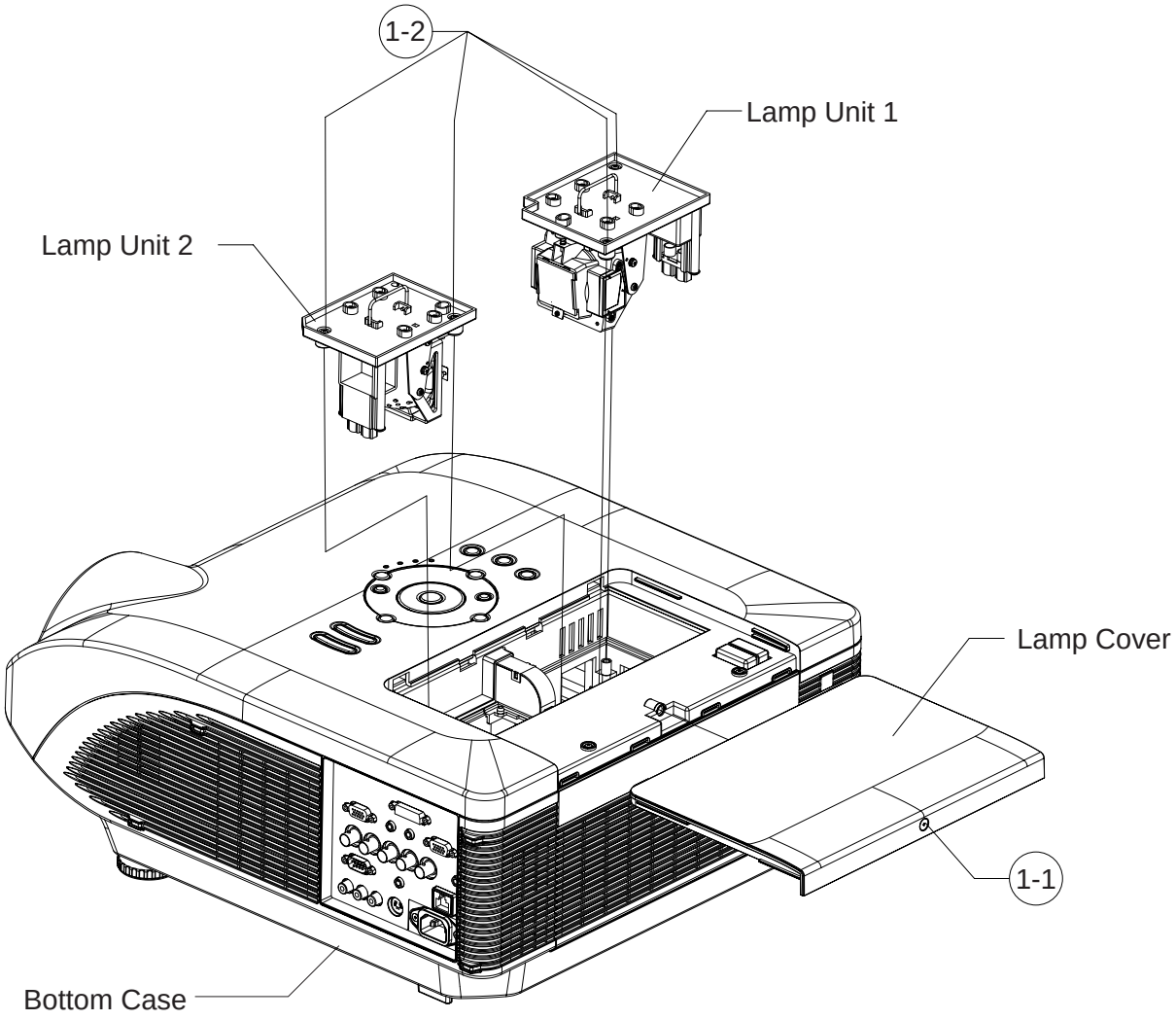
Bottom View



REMOVING OF MAJOR PARTS

1. Removing the Lamp Unit

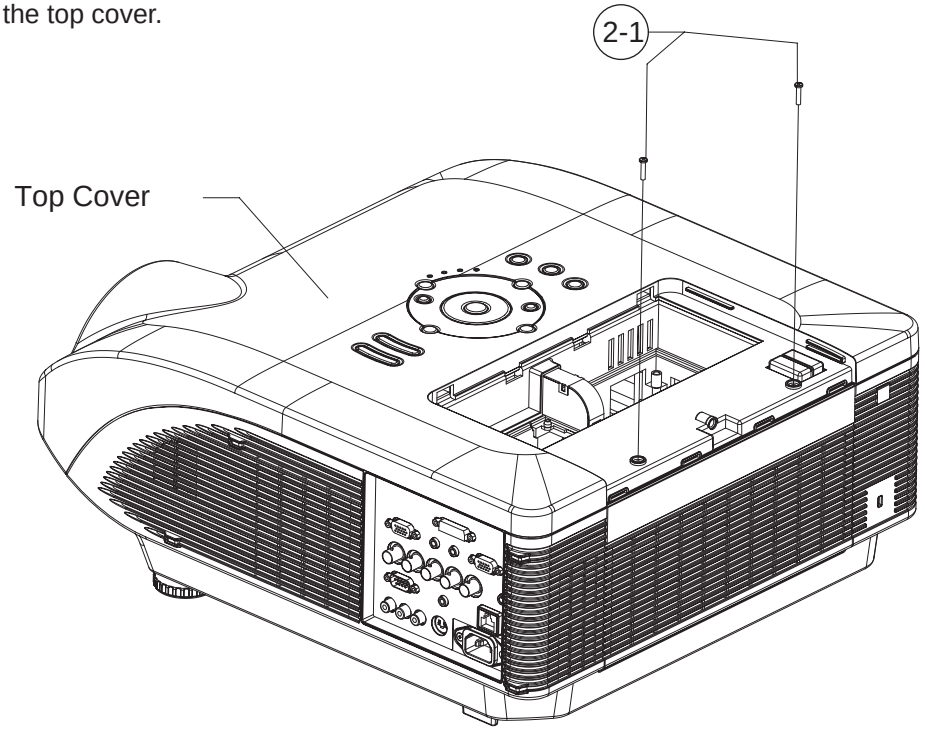
1-1. Remove the screw from the lamp cover and detach the lamp cover.
1-2. Remove the four screws from the lamp units and take out the lamp units.

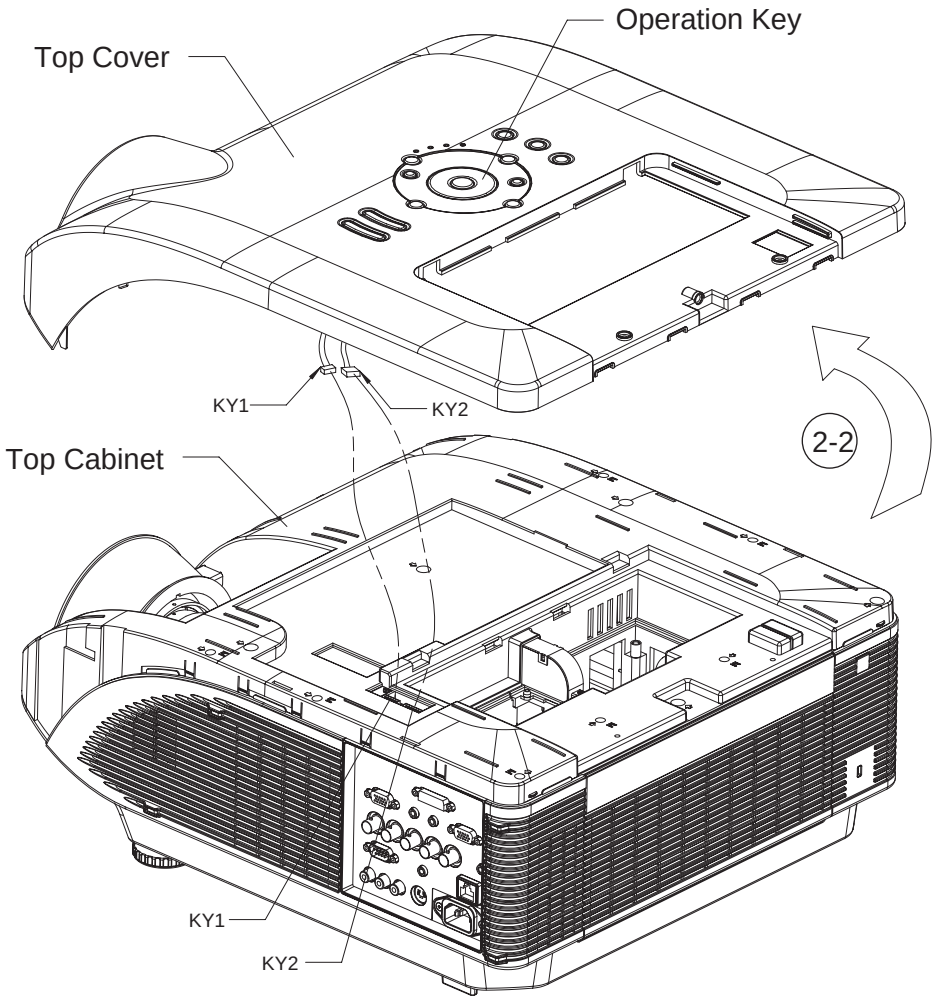


2. Removing the Top Cover

2-1. Remove the two screws from the top cover.

2-2. Slowly lift the back of the top cover and disconnect the operation key connectors (KY1 and KY2). Pull up and off the top cover.

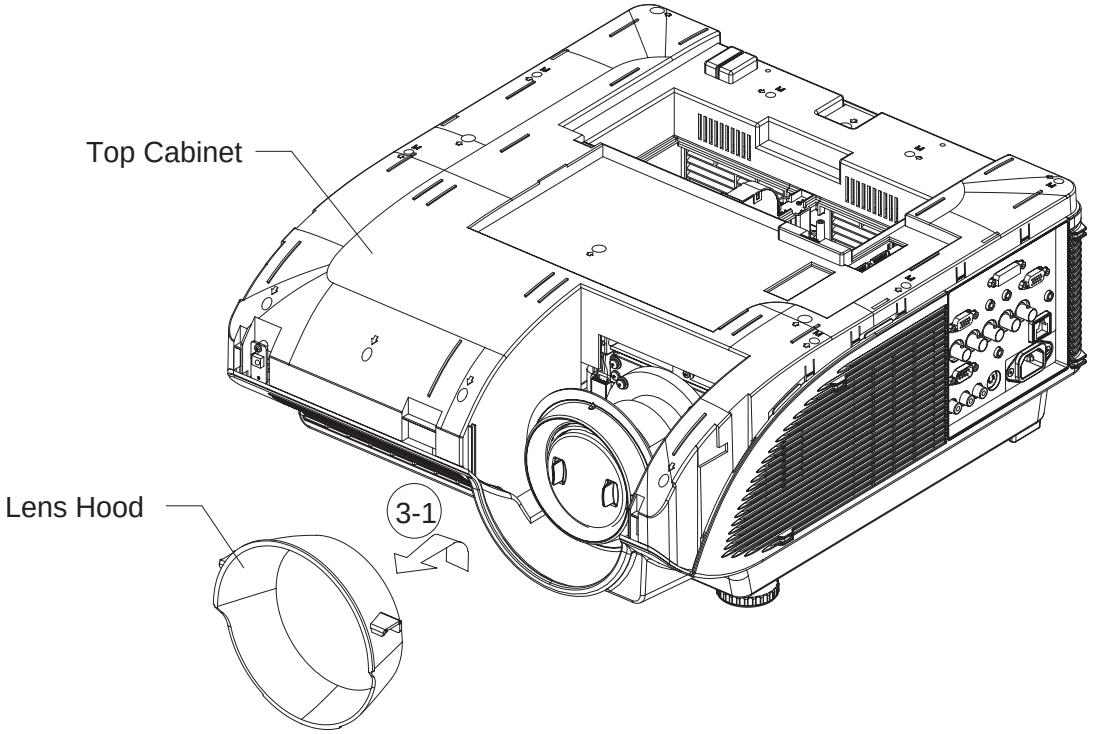




For XG-PH50X-NL, the lens removal operations (sections 3 - 6) are unnecessary.

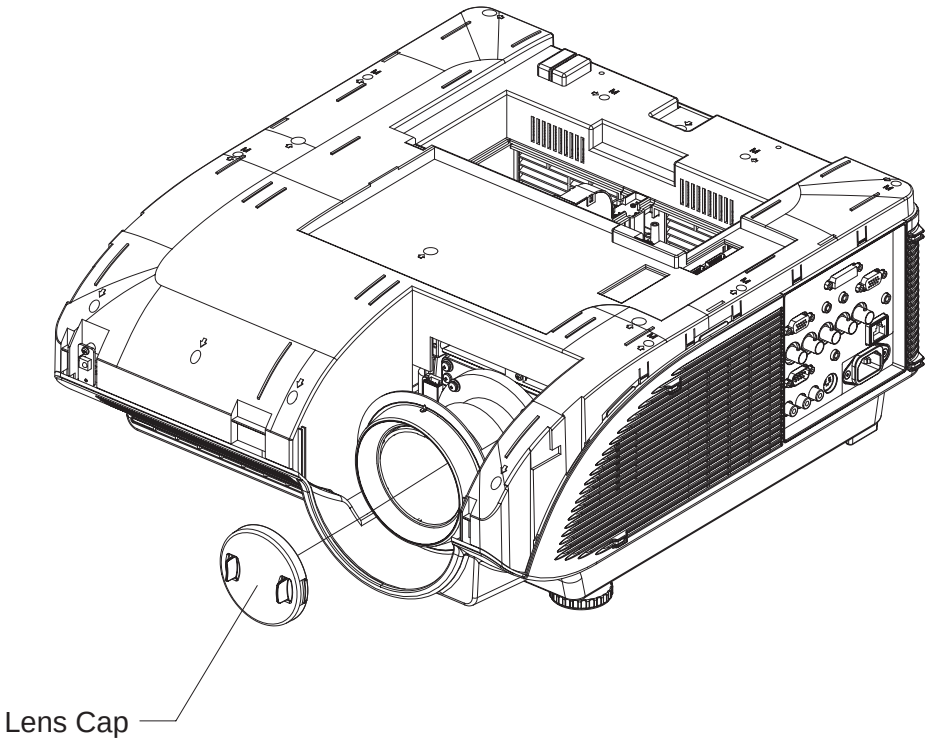
3. Removing the Lens Hood

3-1. Slowly lift the lens hood up until it can be moved forward and then move it forward and detach the lens hood.



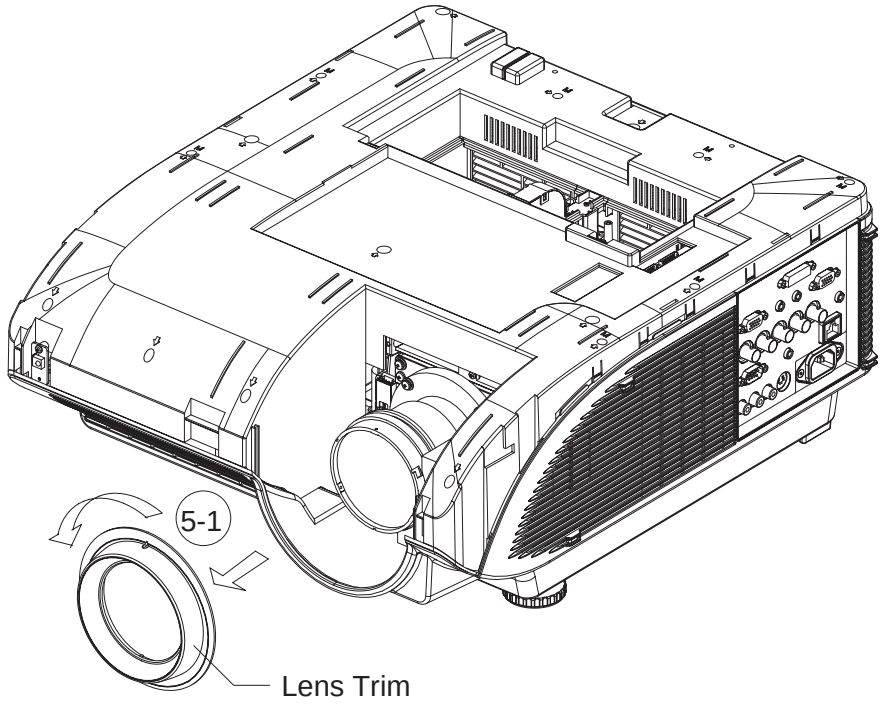
4. Removing the Lens Cap

4-1. Remove the lens cap.



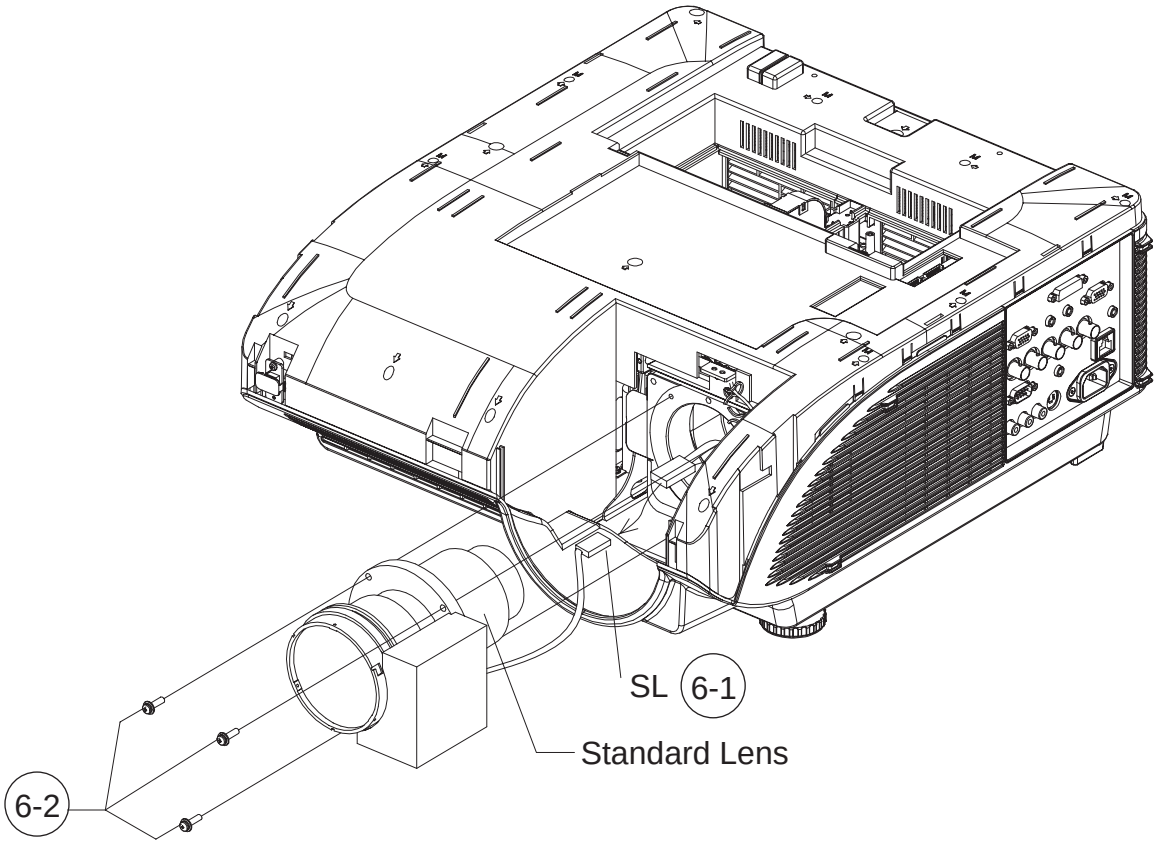
5. Removing the Lens Trim

5-1. Rotate the lens trim counterclockwise and then detach the lens trim.



6. Removing the Standard Lens

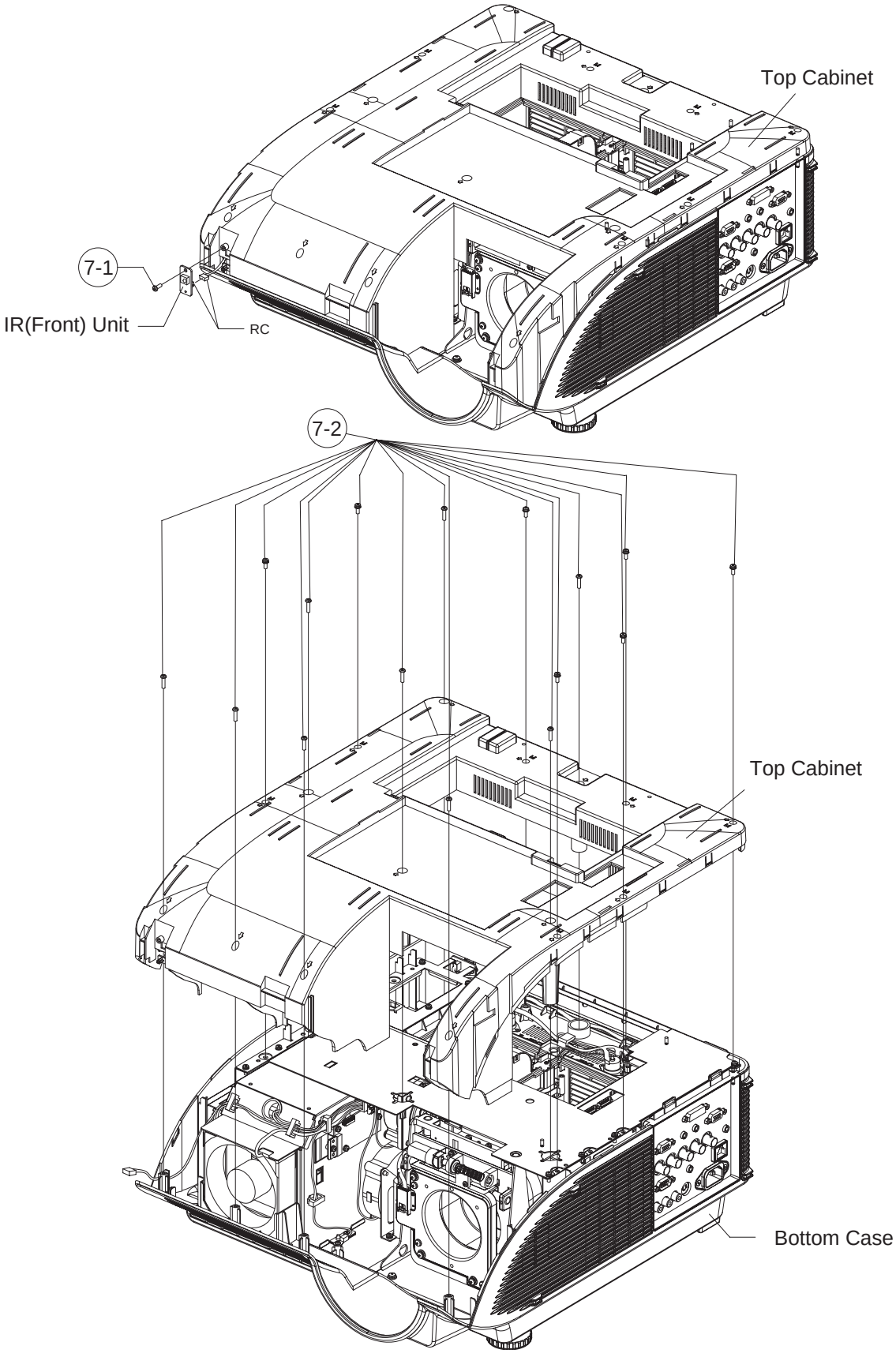
6-1. Disconnect the standard lens connector (SL).
6-2. Remove the three screws from the standard lens and take out the standard lens.



7. Removing the Top Cabinet

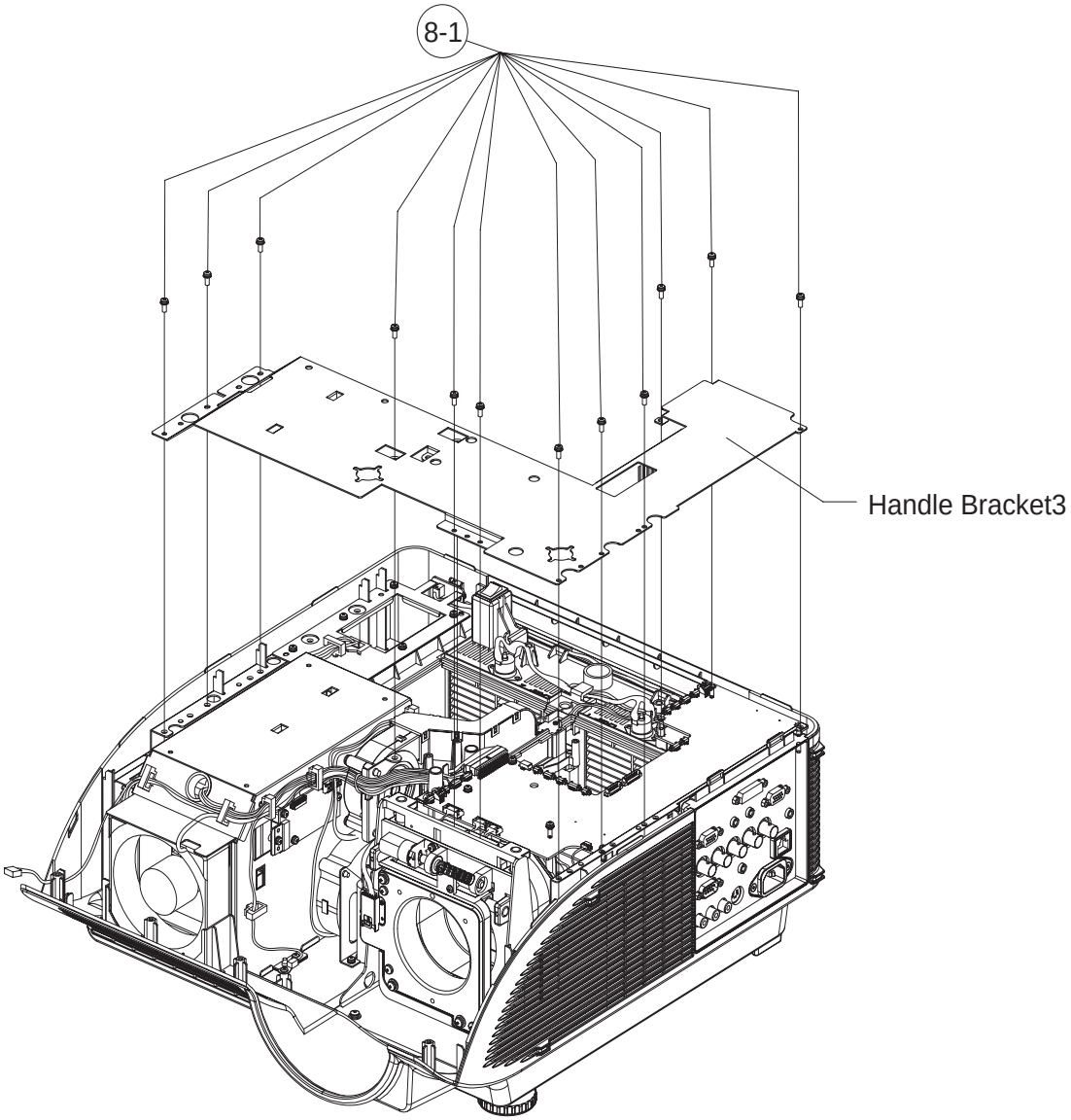
7-1. Remove the screw from IR(Front) unit, take out the IR(Front) unit and then disconnect the IR(Front) unit connector (RC).

7-2. Remove the sixteen screws from the top cabinet and then pull up and off the top cabinet.



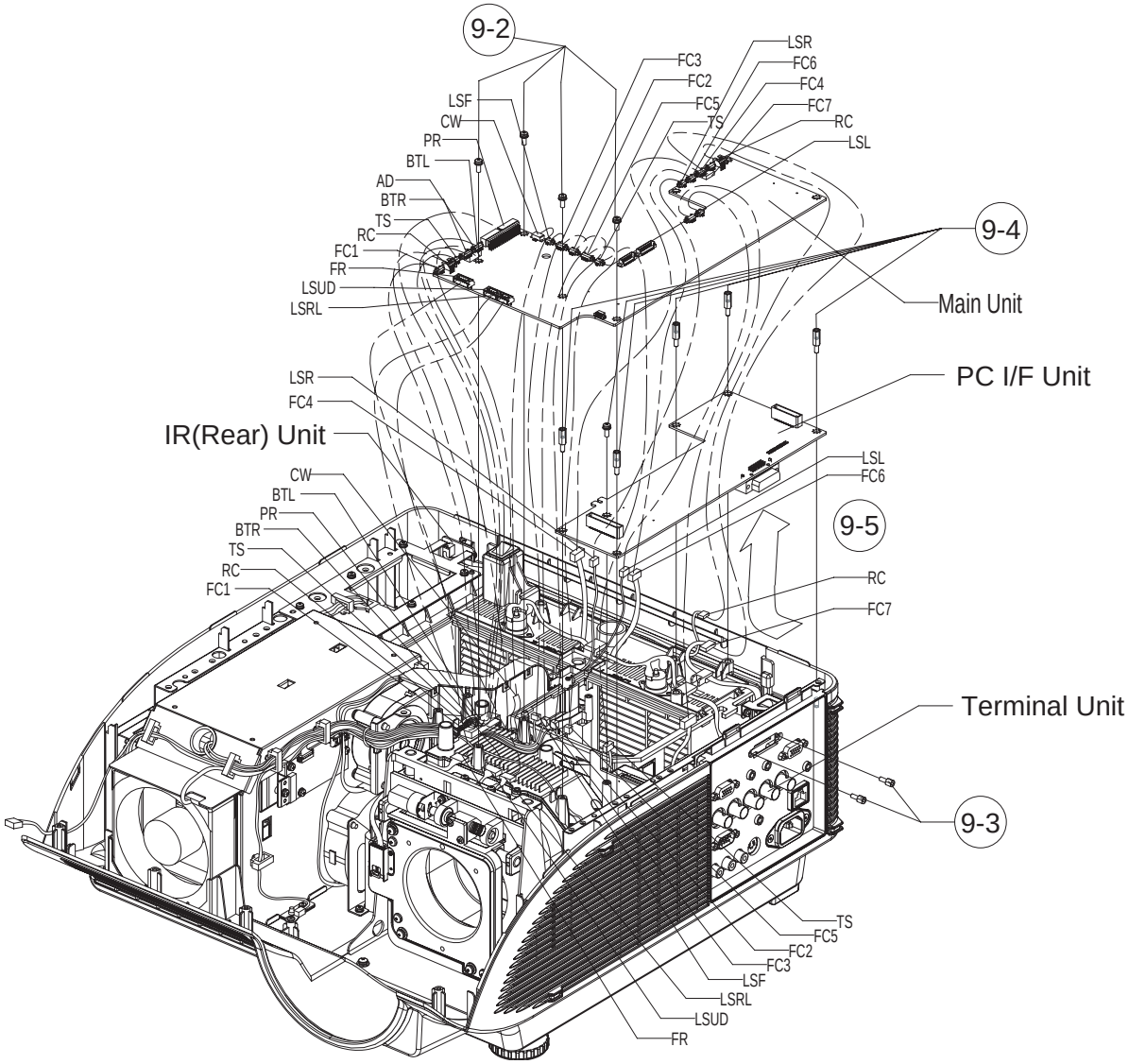
8. Removing the Handle Bracket3

8-1. Remove the Twelve screws from the handle bracket3 and detach the handle bracket3.



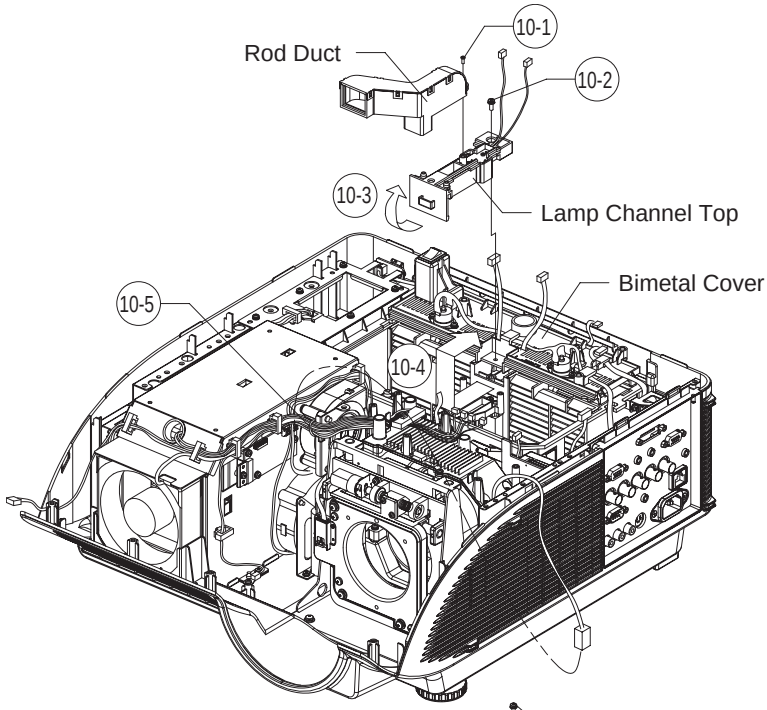
9. Removing the PWBA Units

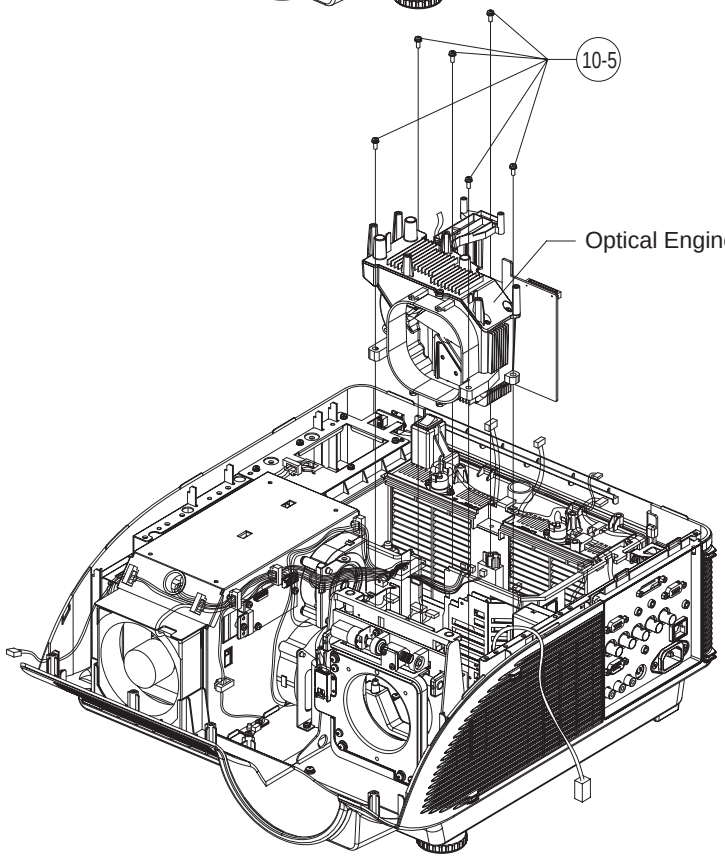
9-1. Disconnect all the connector from the Main Unit.
9-2. Remove the four screws from the Main Unit. Detach the Main Unit from the PC I/F Unit.
9-3. Remove the two spacers from the PC I/F Unit.
9-4. Remove the five spacers and the screw.
9-5. Disconnect the PC I/F Unit from the Terminal Unit and then detach the PC I/F Unit.



10. Removing the Optical Engine

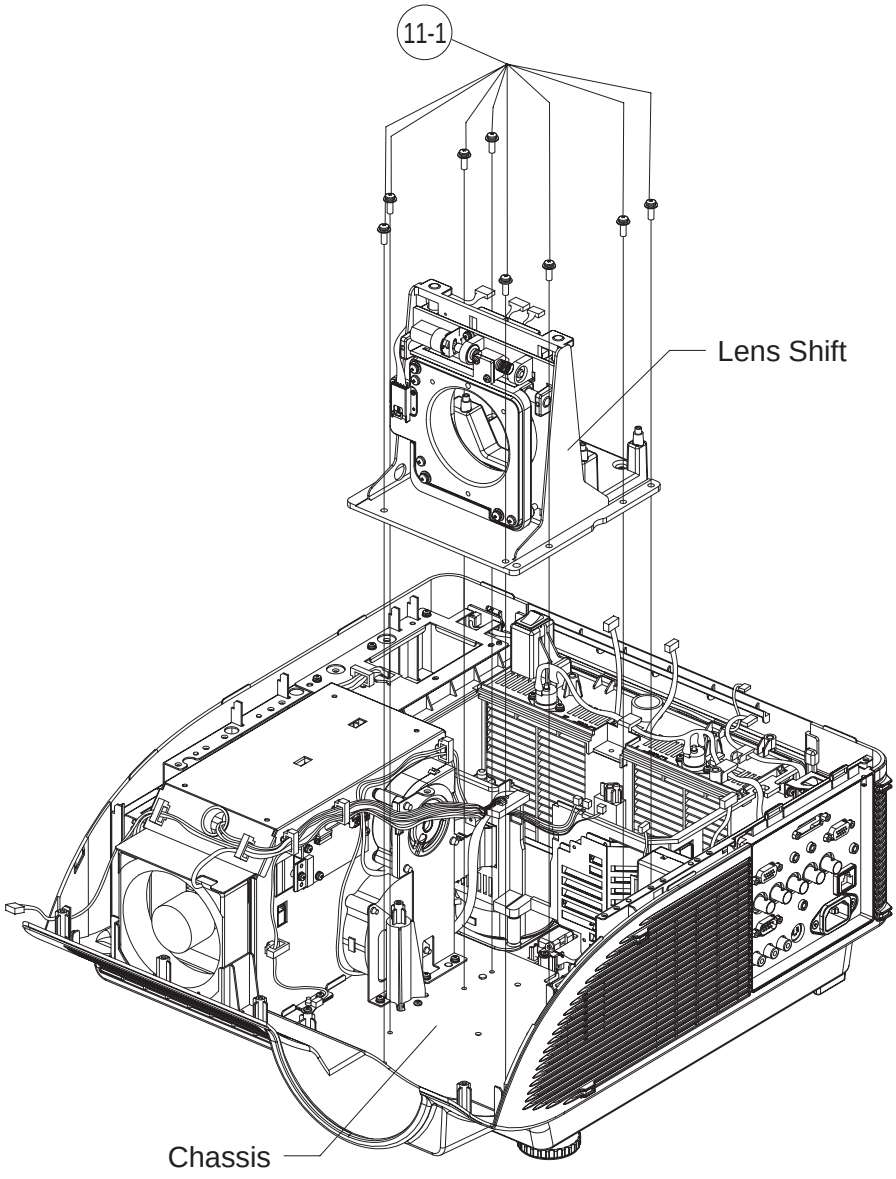
10-1. Remove the screw from the rod duct and then detach the rod duct.
10-2. Remove the screw from the lamp channel top.
10-3. Unhook the front of the lamp channel top and take it out.
10-4. Slide the bimetal cover and detach it out.
10-5. Release the cable tie and then disconnect the left speaker connector. Remove the six screws from the optical engine and then lift the optical engine out of position.





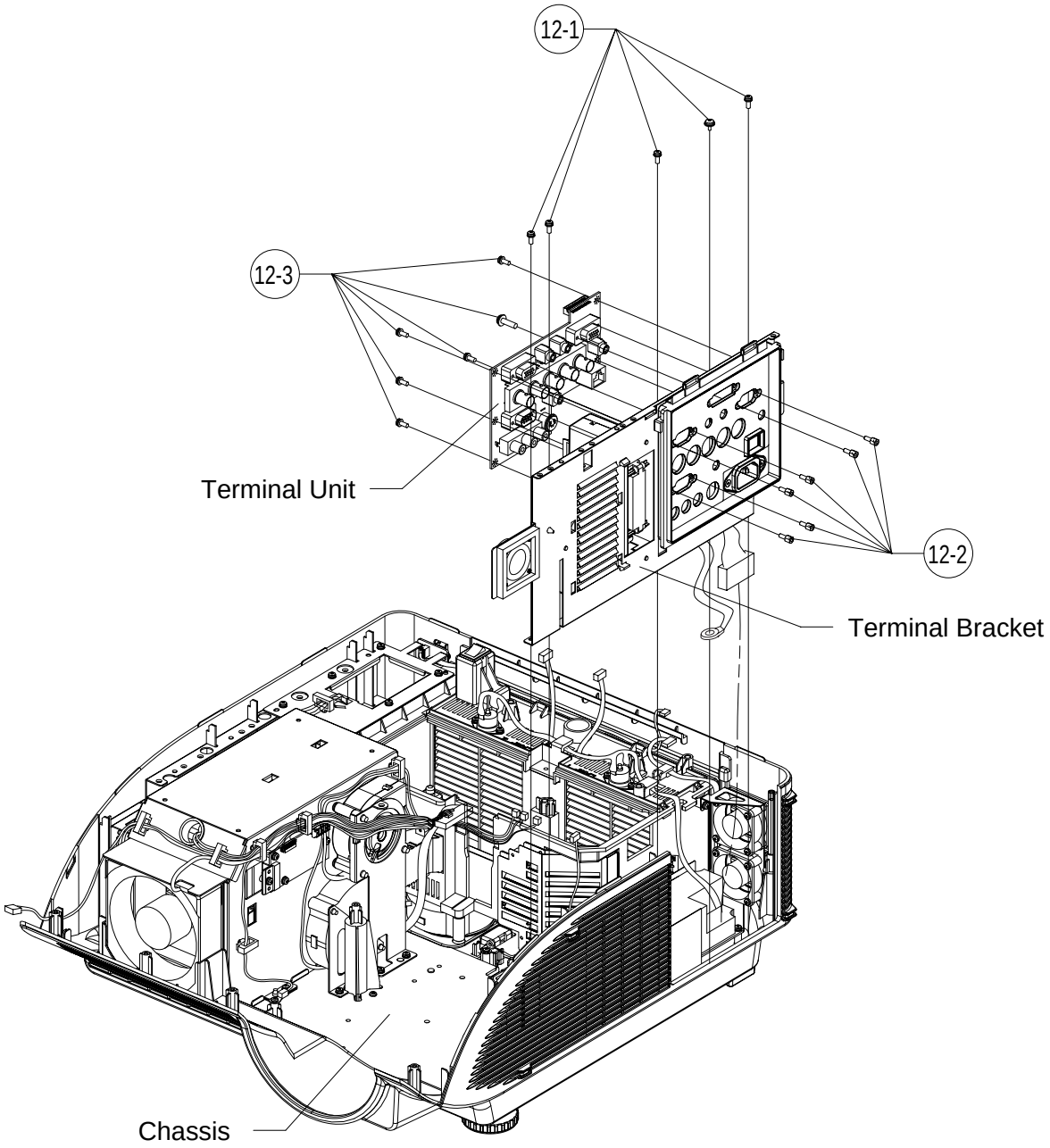
11. Removing the Lens Shift

11-1. Remove the eight screws from the lens shift and then lift the lens shift out of position.



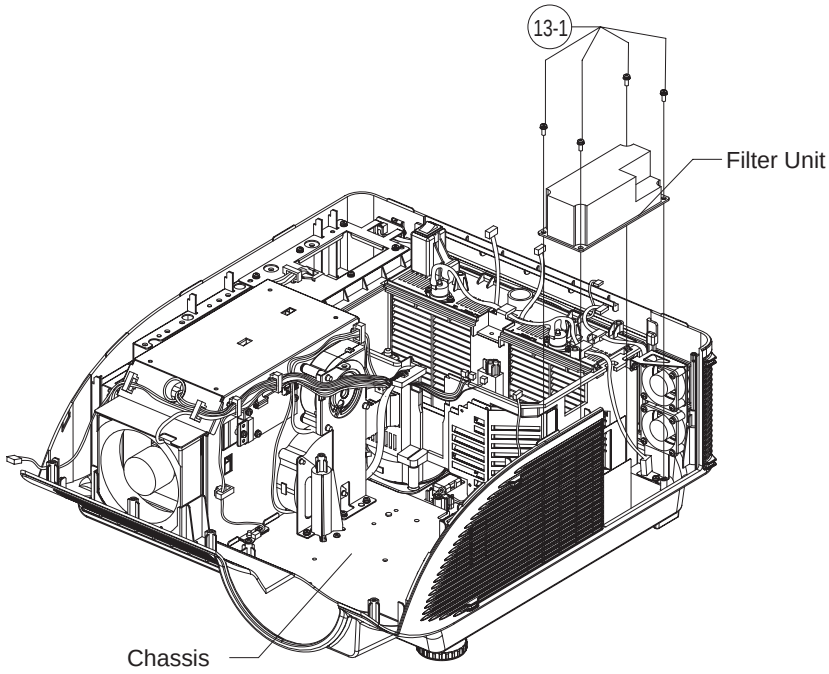
12. Removing the Terminal Unit

12-1. Remove the five screws from the terminal bracket, lift the terminal bracket and then disconnect the AC socket.
12-2. Remove the six spacers from the terminal unit.
12-3. Remove the six screws from the terminal unit and take out the terminal unit.



13. Removing the Filter Unit

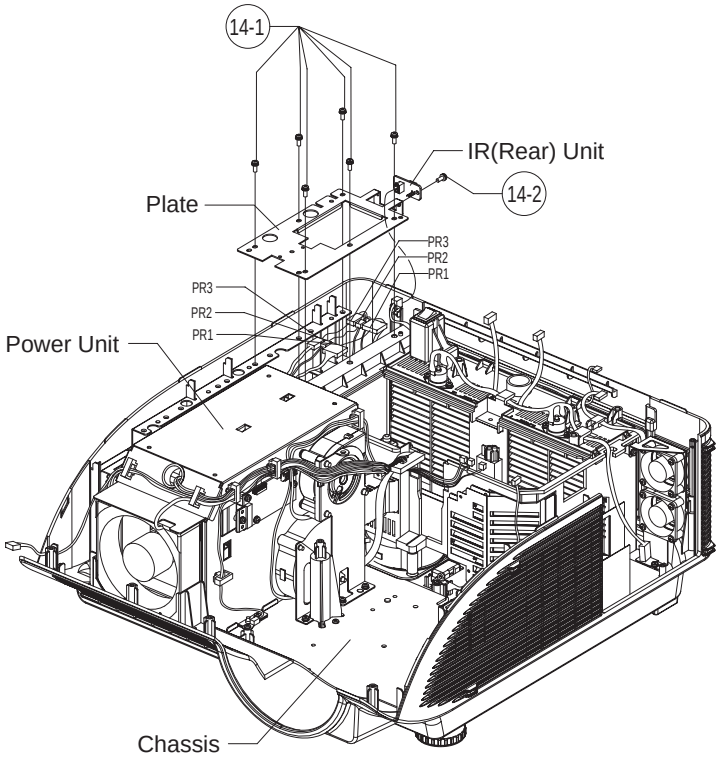
13-1. Disconnect all the connectors from the filter unit. Remove the four screws from the filter unit and then take it out.



14. Removing the IR(Rear) Unit

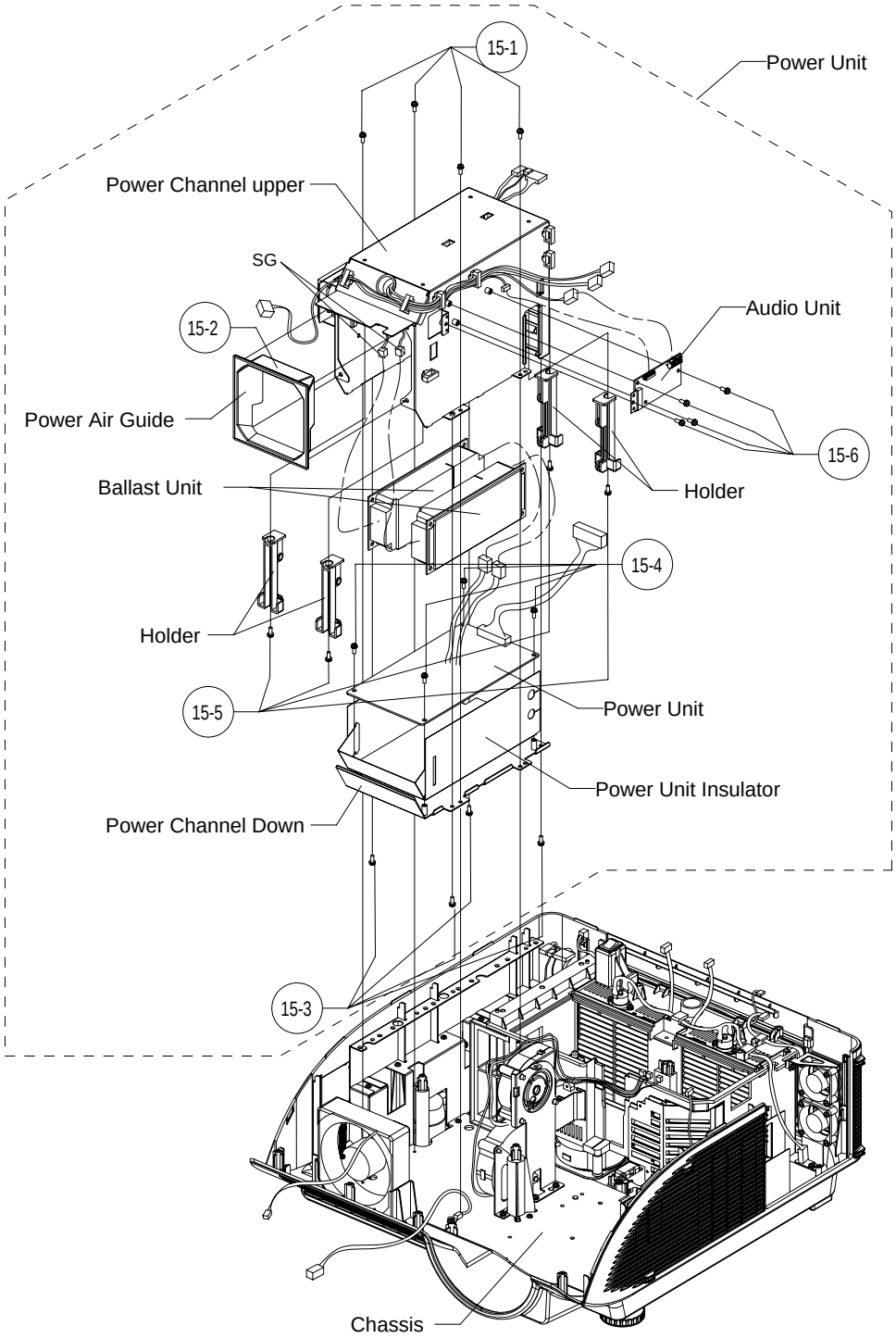
14-1 Disconnect all the connectors from the power unit. Remove the six screws from the Plate and then take out the Plate.

14-2. Remove the screw from the IR(Rear) unit and detach the IR(Rear) unit.



15. Removing the Power Unit and Audio Unit

15-1. Remove the four screws from the power unit.
15-2. Detach the power air guide from the power channel upper.
15-3. Remove the four screws from the power channel down and then disconnect the two power connector PR.
15-4. Remove the four screws from the power unit and then take out the power unit.
15-5. Remove the four screws from the holders and then disconnect the signal connectors SG.
15-6 Remove the four screws from the audio unit and then take out the audio unit.



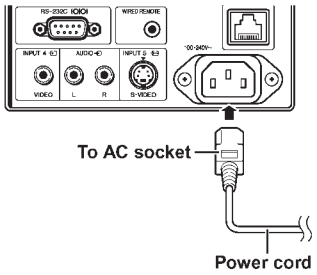
RESETTING THE TOTAL LAMP TIMER

● **Resetting the total lamp timer**

When replacing the lamp, reset the total lamp timer in the procedure below.

Info

- Make sure to reset the lamp timer only when replacing the lamp. If you reset the lamp timer and continue to use the same lamp, this may cause the lamp to become damaged or explode.



1 Connect the power cord.

- Plug the power cord into the AC socket of the projector.

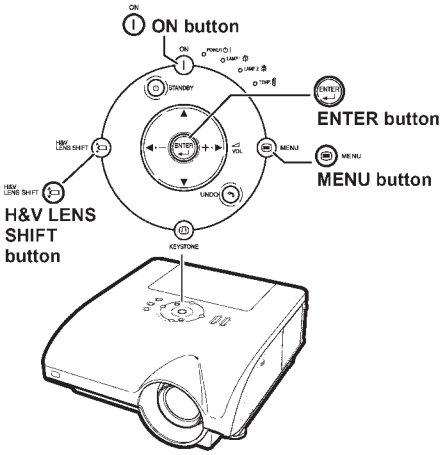
2 Reset the lamp timer.

For Lamp 1

- When you reset the timer for AN-PH50LP1, while simultaneously holding down H&V LENS SHIFT and ENTER, press ON on the projector.
- "LAMP 1 100%" is displayed, indicating that the lamp timer is reset.

For Lamp 2

- When you reset the timer for AN-PH50LP2, while simultaneously holding down MENU and ENTER, press ON on the projector.
- "LAMP 2 100%" is displayed, indicating



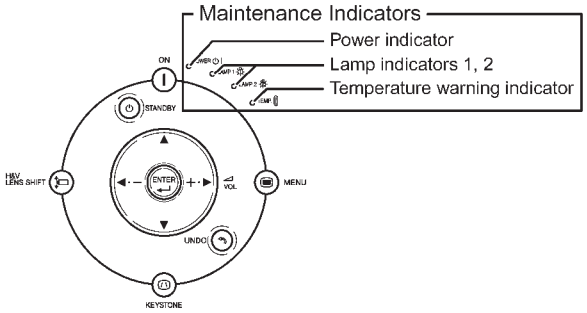
Lamp

■ It is recommended that the lamp units (optional: AN-PH50LP1 and AN-PH50LP2) be replaced when the remaining lamp life becomes 5% or less, or when you notice a significant deterioration in the picture and color quality. The lamp life (percentage) can be checked with the on-screen display.

■ Purchase a replacement lamp unit of type AN-PH50LP1 and AN-PH50LP2 from your place of purchase, nearest Sharp Authorized Projector Dealer or Service Center.

■ **The warning lights on the projector indicate problems inside the projector.**

■ **If a problem occurs, either the temperature warning indicator or the lamp indicator will illuminate red, and the projector will enter the standby mode. After the projector has entered the standby mode, follow the procedures given below.**



About the temperature warning indicator

If the temperature inside the projector increases, due to blockage of the air vents, or the setting location, "TEMP." will illuminate in the lower left corner of the picture. If the temperature keeps on rising, the lamp will turn off and the temperature warning indicator will blink, the cooling fan will run for a further 90 seconds, and then the projector will enter the standby mode. After "TEMP." appears, ensure to perform the measures

Maintenance indicator			Problem	Cause	Possible solution
	Normal	Abnormal			
Temperature warning indicator	Off	Red on (Standby)	The internal temperature is abnormally high.	• Blocked air intake	• Relocate the projector to an area with proper ventilation.
				• Cooling fan break-down • Internal circuit failure • Clogged air intake • Clogged intake vent cover	• Take the projector to your nearest Sharp Authorized Projector Dealer or Service Center for repair. • Clean the air vents and the intake vent cover.
Lamp indicators 1, 2	Green on (Green blinks when the lamp is warming up.)	Red on	The lamp does not illuminate.	• The lamp is shut down abnormally.	• Disconnect the power cord from the AC outlet, and then connect it again.
			Time to change the lamp.	• Remaining lamp life becomes 5% or less.	• Carefully replace the lamp. • Take the projector to your nearest Sharp Authorized Projector Dealer or Service Center for repair. • Please exercise care when replacing the lamp.
		Red on (Standby)	The lamp does not illuminate.	• Burnt-out lamp • Lamp circuit failure	
Power indicator	Green on/ Red on	Red blinks	The power indicator blinks in red when the projector is on.	• The intake vent cover is open.	• Securely install the cover. • If the power indicator blinks even when the intake vent cover is securely installed, contact your nearest Sharp Authorized Projector Dealer or Service Center for advice.

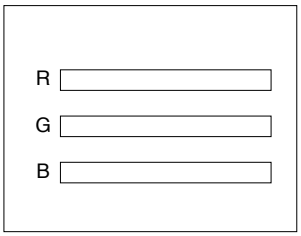
Info

- If the temperature warning indicator blinks and the projector enters the standby mode, the temperature warning indicator starts to illuminate. Check whether any of the ventilation holes are blocked and then try turning the power back on. Wait until the projector has cooled down completely before plugging in the power cord and turning the power back on. (At least 10 minutes.)
- If the power is turned off for a brief moment due to power outage or some other cause while using the projector, and the power supply recovers immediately after that, the lamp indicator will illuminate in red and the lamp may not be lit. In this case, unplug the power cord from the AC outlet, replace the power cord in the AC outlet and then turn the power on again.
- Do not unplug the power cord after the projector has entered the standby mode and while the cooling fan is running. The cooling fan runs for about 90 seconds.

ELECTRICAL ADJUSTMENT

- Turn on the power (lamp on state) and wait for 15 minutes for aging.
- Enter the adjustment process mode with S3602 (tact switch) on the main board.
  In case that top cabinet covered S3602, you can enter by pushing key continuously in sequence.
  key pad On -> Up -> Down -> Up -> Down -> Enter -> Enter -> Menu
  Remote controler On -> Vol up -> Vol down -> Vol up -> Vol down -> Enter -> Enter -> Menu
  * You can exit from factory mode by same method.(Or select "EXIT" in the process mode to exit.)

- Select the group to adjust with the DOWN key or the UP key, and enter the adjustment item with the ENTER key on the remote control or key pad.
- Select the adjustment item with the DOWN key or the UP key.
- Use the LEFT key or the RIGHT key for adjustment.
- To return from the adjustment item to the adjustment group, use the UNDO key or the MENU key.
- Change internal test pattern and input signal with the MUTE key

No.	Adjusting point	Adjusting conditions	Adjusting procedure
1	**Initialization of EEPROM**	1. Turn on the power (the lamp lights up) and warm up the system for 15 minutes. 2. Select the following group and subject. Group: SSS Subject: S2	1. Press S3602 to enter the process mode. 2. Execute the S2 command on the SSS menu. *With the S2 command, all the circuit boards than the PC board will be initialized. (Note) Since the PC I/F unit is initialized with S1, do not carry out S1. The PC I/F unit is already adjusted. When the PC I/F unit must be adjusted, in such case as S1 is carried out by mistake, adjust it according to the "PC I/F adjustment method" at the end of this document. 3. Wait approximately 30 seconds and when "INPUT1" appears, turn off the power. 4. After all the fans stop, turn the power back on.
2	**Write MAC address**		1. Read a sticker which is written mac address on main board. 2. Write MAC address by 232c serial cable.(For the procedure, refer to the attachment.)
3	**Adjustment of CW index**	1. Signal input: 64 STEP color bar signal. 2. Select the following group and subjects. Group : DLP Subject : CW-INDEX	1. Feed the signal to INPUT 1. 2. Select subject and make adjustment so that the uniformity should be smooth. 
4	**Adjustment of DLP voltage**	1. SRead voltage rank of DLP description. 2. Select the following group and subjects. Group : DLP Subject : DMD-BIN	1. Adjust DMD-BIN corresponding to the rank which has been read. (on the main board) Rank / setting value B / 0 C / 1 D / 2 E / 3 *Carry out adjustment when DLP chip or PC board has been replaced

No.	Adjusting point	Adjusting conditions	Adjusting procedure
5-1	**Adjustment of Video bright-ness**	1. Select the following group and subject. Group : VIDEO Subject : BRIGHT	1. Check that the value is 115.
5-2	**Adjustment of Video contrast**	1. Select the following group and subject. Group : VIDEO Subject : PICTURE-SUB	1. Check that the value is 96.
6	**Adjustment of component Cr/ Cb offset (1)**	1. Feed the color difference signal(480i) to INPUT1 : Y 0% brightness, Cb and Cr 0% white pat-terns. 2. Select the following group and subject. Group : COMPO Subject : COMPO-AUTO	1. After signal input, select COMPO-AUTO for automatic adjustment.
7	**Adjustment ofcomponent brightness**	1. Feed the color difference signal(480i) to INPUT1 : Y 0% brightness, Cb and Cr 0% white pat-terns. 2. Select the following group and subject. Group : COMPO Subject : G-BRIGHT	1. Make adjustment so that some bits should be miss-ing in the picture. * refer to the following photo image
8	**Adjustment of component Cr/ Cb offset (2)**	1. Feed the color difference signal(480i) to INPUT1 : Y 0% brightness, Cb and Cr 0% white pat-terns. 2. Select the following group and subject. Group : COMPO Subject : CR-OFFSET	1. Reduce the CR-OFFSET value by 2 points.
9	**Adjustment of RGB white balance**	1. Feed the 50% gray pattern signal (XGA, 60 Hz) to IN-PUT1. 2. Select the following group and subject. Group : DLP Subjects : R1-GAIN (Red) B1-GAIN (Blue)	1. Adjust R-1 GAIN and B1-GAIN so that x-value should be 290 ± 3 and y-value 310 ± 3.
10	**Adjustment of sRGBwhite balance**	1. Feed the 50% gray pattern signal (XGA, 60 Hz to IN-PUT1 2. Select the following group and subject. Group : DLP Subjects : S-G1-GAIN (Green) S-B1-GAIN (Blue)	1. Adjust S-G1-GAIN and S-B1-GAIN so that x-value should be 313 ± and y-value 329 ± 5.

No.	Adjusting point	Adjusting conditions	Adjusting procedure
11	**adjustment of videowhite balance**	1. Feed the 50% gray pattern signal (NTSC, burst signal) to INPUT4. 2. Select the following group and subject. Group : DLPV Subjects: V-R1-GAIN (Red) V-B1-GAIN (Blue)	1. Adjust V-R1-GAIN and V-B1-GAIN so that x-value should be 290 ± 3 and y-value should be 310 ± 3.
12	**Adjustment of DTV white balance**	1. Feed the 50% gray pattern signal (480i, color difference signal) to INPUT1. 2. Select the following group and subject. Group : DLPV Subjects : C-R1-GAIN(Red) C-B1-GAIN(Blue)	1. Adjust C-R1-GAIN and C-B1-GAIN so that x-value should be 290 ± 3 and y-value should be 310 ± 3.
13	**Factory settings**	1. Select the following group and subject. Group : SSS Subject : S4 (North America) S3 (Europe/Asia/Australia) S5 (Japan)	1. Make the following settings. PH50XU : S4 (to north America) PH50X : S5 (to Japan) Other : S3 (to Europe/Asia/Australia)

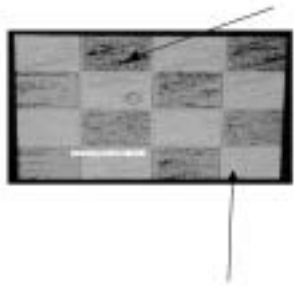
for reference / setting

	OSD language	Video-set up level
S3	English	0IRE
S4	English	7.5IRE
S5	Japanese	0IRE

No.	Adjusting point	Adjusting conditions	Adjusting procedure
14	**Lens shift position**		1. Move lens shift position Vertical : Top position Horizontal: Center
15	**Turn off the power**		

PC I/F adjustment method

(Note)
Since the PC I/F unit is initialized with S1, do not carry out S1. The PC I/F unit is already adjusted.
When the PC I/F unit must be adjusted, in such case as S1 is carried out by mistake, adjust it according to the followings

No.	Adjusting point	Adjusting conditions	Adjusting procedure
1	**Initialization of EEPROM**	1. Select the following group and subject. Group : SSS Subject : S1	1. Press S3602 to enter the process mode. 2. Execute the S2 command on the SSS menu.(By S1, all the contents of EEPROM are initialized.)
2	**RGB tone reproduction adjustment**	1. Feed the window pattern signal that has 92% (0.64Vbw) and 0% signals (XGA/60Hz) to input 1 2. Select the following group and subject. Group : A/D Subjects : AD-AUTO * When you can not prepare 92% signal 1. Feed the window pattern signal that has 100% (0.7Vbw) and 0% signals. (XGA/60Hz) to input 1 * "MUTE" key will be change to the factory gamma	1. After signal input, select AD-AUTO for automatic adjustment. 1. Select the following group and subject. Group : A/D Subjects : G-BRIGHT 2. Make adjustment so that some bits should be missing in black area of the picture.  3. Select the following group and subject. Group : A/D Subjects : G-D 4. Make adjustment so that some bits should be missing in white area of the picture. 5. Select the following subject. Subjects : R-BRIGHT 6. Make adjustment so that some bits should be missing in black area of the picture. 7. Select the following subject. Subjects : R-D 8. Make adjustment so that some bits should be missing in white area of the picture. 9. Select the following subject. Subjects : B-BRIGHT 10. Make adjustment so that some bits should be missing in black area of the picture. 11. Select the following subject. Subjects : B-D 12. Make adjustment so that some bits should be missing in white area of the picture.

how to write MAC address (Write) Send the following 232c commands in sequence

1. | _ | L | M | A | 0 | 0 | *1 | *2 | + "enter" key
   wait "OK"
2. | _ | L | M | A | 1 | 0 | *3 | *4 | + "enter" key
   wait "OK"
3. | _ | L | M | A | 2 | 0 | *5 | *6 | + "enter" key
   wait "OK"
4. | _ | L | M | A | 3 | 0 | *7 | *8 | + "enter" key
   wait "OK"
5. | _ | L | M | A | 4 | 0 | *9 | *10 | + "enter" key
   wait "OK"
6. | _ | L | M | A | 5 | 0 | *11 | *12 | + "enter" key

*1 the first byte
*2 the second byte
*3 the third byte
*4 the fourth byte
*5 the fifth byte
*6 the sixth byte
*7 the seventh byte
*8 the eighth b
*9 the ninth byte
*10 the 10th byte
*11 the 11th byte
*12 the 12th byte

(Read) Send the following 232c commands

| _ | L | M | A | | | | 1 | + "enter" key

MAC address will be appear on screen

how to write serial number (Write) Send the following 232c commands in sequence

1. | S | N | _ | 1 | 1 | 2 | 3 | 4 | + "enter" key
   wait "OK"
2. | S | N | _ | 2 | 5 | 6 | 7 | 8 | + "enter" key
   wait "OK"
3. | *1 | *2 | *3 | *4 | *5 | *6 | *7 | *8 | *9 | *10 | *11 | *12 | + "enter" key
   *1~*12/serial number
4. | *1 | *2 | *3 | *4 | *5 | *6 | *7 | *8 | *9 | *10 | *11 | *12 | + "enter" key
   wait "OK"
   same data as step3

(NOTE)
When number of characters of the serial number is shorter than twelve characters, please use space character " ".
for example
serial number is "1311163"

| | | | | | 1 | 3 | 1 | 1 | 1 | 6 | 3 | + "enter" key

serial number is "412311112"

| | | | 4 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 2 | + "enter" key

(Read) Send the following 232c commands

| S | N | R | D | | | | 1 | + "enter" key

serial number will be appear on screen

how to check projector status (Read) Send the following 232c commands

| T | F | C | K | | | | 1 | + "enter" key

serial number will be appear on screen

How to enter Service Mode
Select the group"Option2"by user menu and then select "service Mode".
Enter the password "9303"

How to adjust in service mode
- Select the group to adjust with the DOWN key or the UP key,
  and enter the adjustment item with the ENTER key on the remote control or key pad.
- Select the adjustment item with the DOWN key or the UP key.
- Use the LEFT key or the RIGHT key for adjustment.
- To return from the adjustment item to the adjustment group, use the UNDO key or the MENU key.

note
- In service mode, user adjustment value will be changed to default value (Picture/CMS).
  When you exit from service mode, adjustment value will change to user adjustment value.
- In service mode, the following functions will be canceled.
  AV mute / sound mute / freeze / enlarge / PinP
- "standby" button on a remote controller and a operation pad is invalid in the service mode.
  If you would like to turn off the power, please exit from service mode.

adjustment of white balance
Adjustment of RGB PC white balance

1. Feed a RGB PC signal to input1
2. Select the group "DLP"
   PH50X will change to input1/RGB mode automatically

group	Subject	initial value	effective range	adjustment	source/mode
DLP	R1-BLK	0	±20	brightness of red	INPUT1 / RGB
	R1-GAIN	0	±20	contrast of red	INPUT1 / RGB
	G1-BLK	0	±20	brightness of green	INPUT1 / RGB
	G1-GAIN	0	±20	contrast of green	INPUT1 / RGB
	B1-BLK	0	±20	brightness of blue	INPUT1 / RGB
	B1-GAIN	0	±20	contrast of blue	INPUT1 / RGB

adjustment of video white balance

1. Feed a video signal
2. Select the group "DLPV"
   PH50X will change to input4 mode automatically

group	Subject	initial value	effective range	adjustment	source/mode
DLPV	V-R1-BLK	0	±20	brightness of red	INPUT4 / video
	V-R1-GAIN	0	±20	contrast of red	INPUT4 / video
	V-G1-BLK	0	±20	brightness of green	INPUT4 / video
	V-G1-GAIN	0	±20	contrast of green	INPUT4 / video
	V-B1-BLK	0	±20	brightness of blue	INPUT4 / video
	V-B1-GAIN	0	±20	contrast of blue	INPUT4 / video

adjustment of DTV white balance

1. Feed a component signal to input1
2. Select the group "DLPV"
   PH50X will change to input1/component mode automatically

group	Subject	initial value	effective range	adjustment	source/mode
DLPV	C-R1-GAIN	0	±20	contrast of red	INPUT1 / component
	C-G1-GAIN	0	±20	contrast of green	INPUT1 / component
	C-B1-GAIN	0	±20	contrast of blue	INPUT1 / component

(memo) The adjustment value of the brightness is common to video.

adjustment of video

1. Feed a video signal
2. Select the group "VIDEO"
   PH50X will change to input4 mode automatically

group	Subject	initial value	effective range	adjustment	source/mode
VIDEO	PICTURE	0	±60	contrast	INPUT4 / video
	BRIGHT	0	±60	brightness	INPUT4 / video
	TINT	0	±120	tint(effected in NTSC only)	INPUT4 / video
	N-COLOR	0	±120	color saturation	INPUT4 / video
	AGC-CNT	0	0-1	auto gain control 0 : AGC On 1 : AGC Off	INPUT4 / video
	DLY	0	±5		INPUT4 / video
	H-CENTER	0	±10		INPUT4 / video
	FILTER	0	±3	filter gain	INPUT4 / video

adjustment of VIDEO picture

adjustment of VIDEO color

setting of VIDEO gain control

adjustment of delay between chroma and luminance

adjustment of VIDEO horizontal position

adjustment of VIDEO low pass filter

others

switch of component low pass filter

switch of RGB low pass filter

switch of audio delay of internal speaker

group	Subject	initial value	effective range	adjustment	source/mode
VIDEO	COMP-FILTER	0	0-1	0 : filter off, 1 : filter on	INPUT1 / component
	RGB-FILTER	0	0-1	0 : filter off, 1 : filter on	INPUT1 / RGB
	A-DELAY	0	0-1	0 : delay on, 1 : delay off	INPUT4 / video

initialization of adjustment value

RESET - Select this item and push ENTER key.
Value inside each item of "DLP","DLPV" and "VIDEO" is returned to the initial value with RESET.

internal test pattern

group	Subject	initial value	effective range	signal
PATTERN	RGB	1	1-8	raster signal
	RGB[50]	1	1-8	50% raster signal
	CROSS	1	1-9	cross hatch
	FOCUS	1	1-2	checkered signal
	STEP	1	1-2	8step/16step
	COLOR			color bar
	CHR	1	1-4	oblique line and vertical line

firmware version

group	Subject	version
FIRMWARE	SUB	*.**
	MAIN-LOADER	*.**
	MAIN-ZIMAGE	*.**
	MAIN-MTD	*.**
	MAIN-JFFS	*.**

network setting

group	Subject	address
NETWORK	IP ADDRESS	192.168.150.002
	MAC ADDRESS	**:**:**:**:**:**

exit from service mode

group
EXIT

- Select this item and push ENTER key.

Failure mode when the lamp does not light up even when powered on

1. Status of LED

- POWER does not light up.
  The sub CPU (IC3603) does not start. Check the peripheral circuits.

- POWER blinks in red.
  0.5-second interval: Fan error detection.
  (This unit detects the number of fan revolutions. When the fan is running more slowly than the preset lower speed limit, the power is shut down by the protection function even if the fan does not stop completely.)
  1-second interval: Bottom air filter cover (RCS) detection.
  2-second interval: Communication error between sub CPU (IC3603) and main CPU (IC8003).

- LAMP LED blinks in red.
  1-second interval: Lamp leaf switch detection.
  (The power is not turned on if the lamp cartridge is removed from the unit.)

2. Checking the status via RS232C serial communication
   Send"TFCK△△△1"+ENTER,"TABN△△△1" via 232C communication to check the status of the projector.

   Return value example of the normal unit
   TFCK 1
   [RCS] Close
   [Lamp1 Leaf] Close
   [Lamp2 Leaf] Close
   [Main-Sub] Communication OK.
   [Fan] Normal
   [pwm Fan1] No error
   [pwm Fan2] No error
   [pwm Fan3] No error
   [pwm Fan4] No error
   [pwm Fan5] No error
   [pwm Fan6] No error
   [dac Fan0] No error
   [dac Fan1] No error
   [Temperature] Normal
   [Lamp1 Non Light] Normal
   [Lamp2 Non Light] Normal
   [Lamp Life1] Normal
   [Lamp Life2] Normal
   OK

3. Others

- The lamp does not light up if the color wheel motor does not run.
- The lamp does not light up if the thermistor sensor is not connected (e.g. breaking of wire).
- The lamp does not light up when if a communication error occurs between IC3 and IC25 on the PC board.

4. Disabling of the sensors
   Caution: When the unit is returned to a user with the sensors disabled, the cabinet may be deformed by heat because the protection function does not work. After completion of inspection, be sure to restore the sensors to their original state.

- Temperature sensor
  Mount a resistor of 10 k_ between pins 1 and 2 of CN7205 and a resistor of 12 kΩ between pins 1 and 2 of CN7005 to turn on the power with the sensor detached. Since the unit is set to the sensor temperature fixed mode, the fan speed is fixed to low speed. After completion of inspection, be sure to remove the resistors.

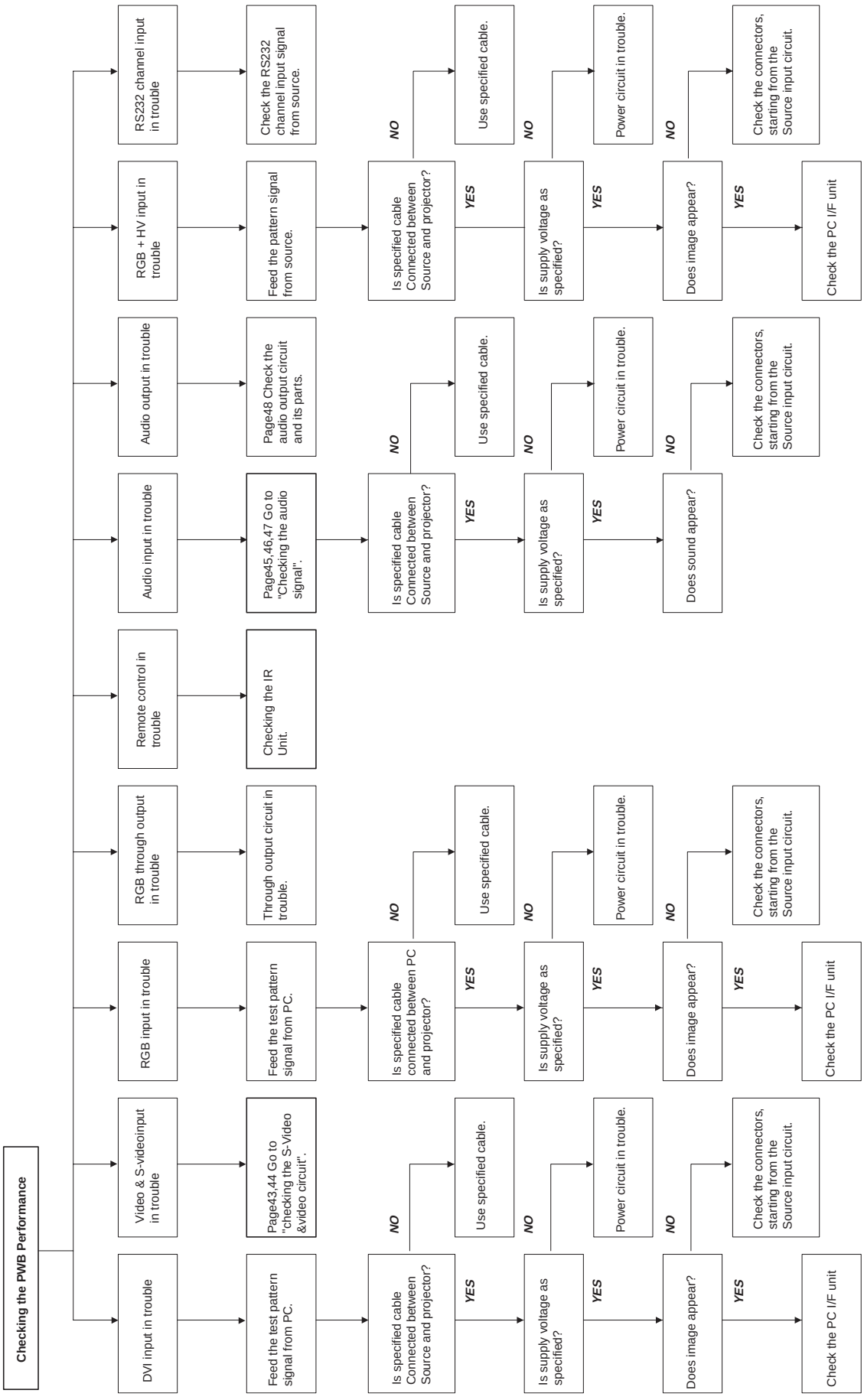
- Fan lock detection
  This unit detects the pulse of the fan. When checking the operation of the PWBs without running the fan, connect the pin C8 of IC3603 (on the pin C8 side of R3727) to GND with a jumper wire. Even if the fan does not run, the unit continues operation. Therefore the reliability of parts cannot be maintained. After completion of inspection, be sure to remove the jumper wire.

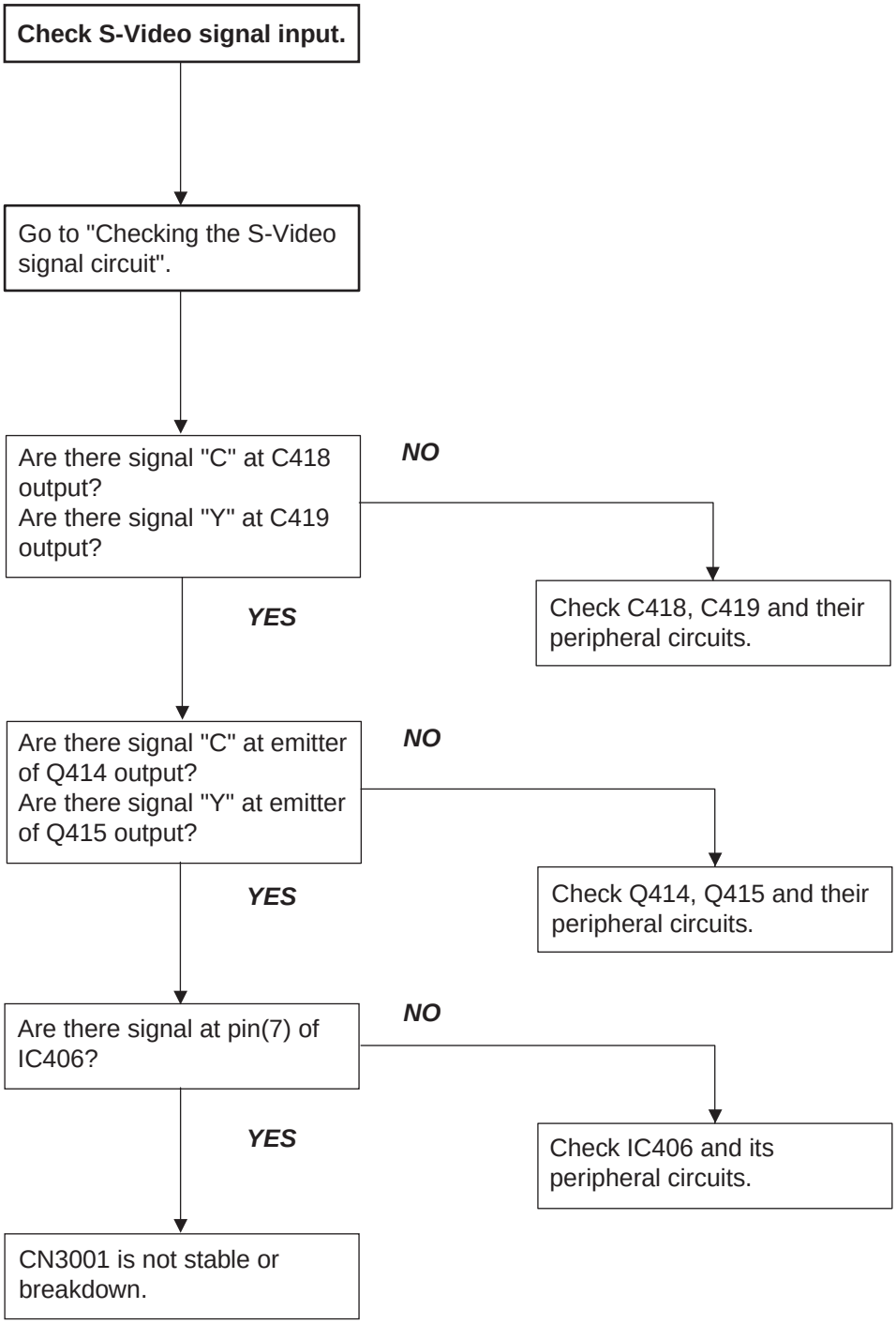
- Air filter cover detection
  Short-circuit between pins 1 and 2 of CN7001.
  Since the power turns on even if the filter cover is removed, the user may be injured with the fan. After completion of inspection, be sure to restore it to its original state.

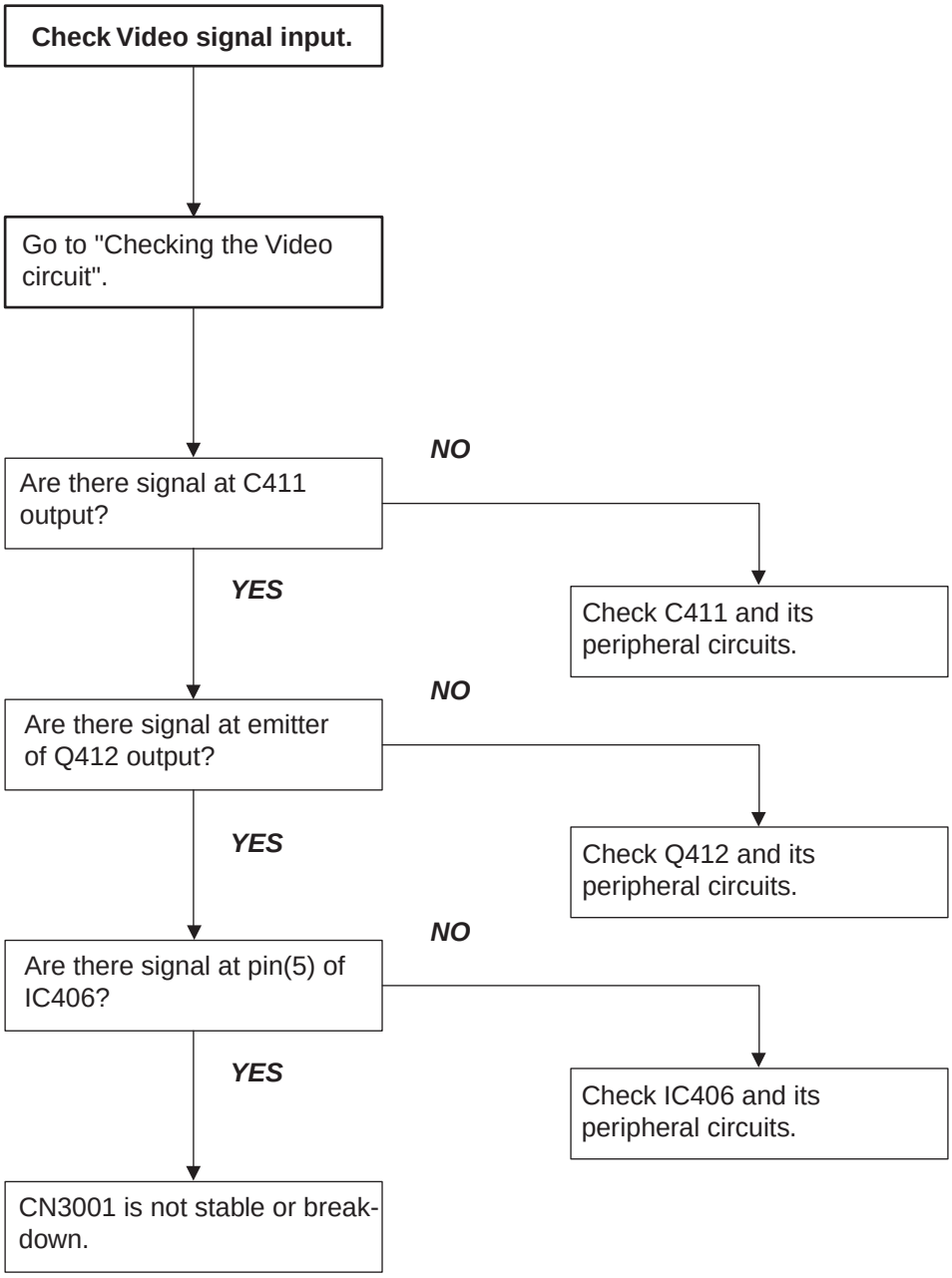
- Lamp cartridge detection
  This unit has two lamps. When turning on the lamp with one lamp cartridge removed, the cabinet may be deformed by heat. After completion of inspection, be sure to restore the lamp cartridge to its original state.
  Short-circuit between pins 1 and 2 of CN2801/CN2802.

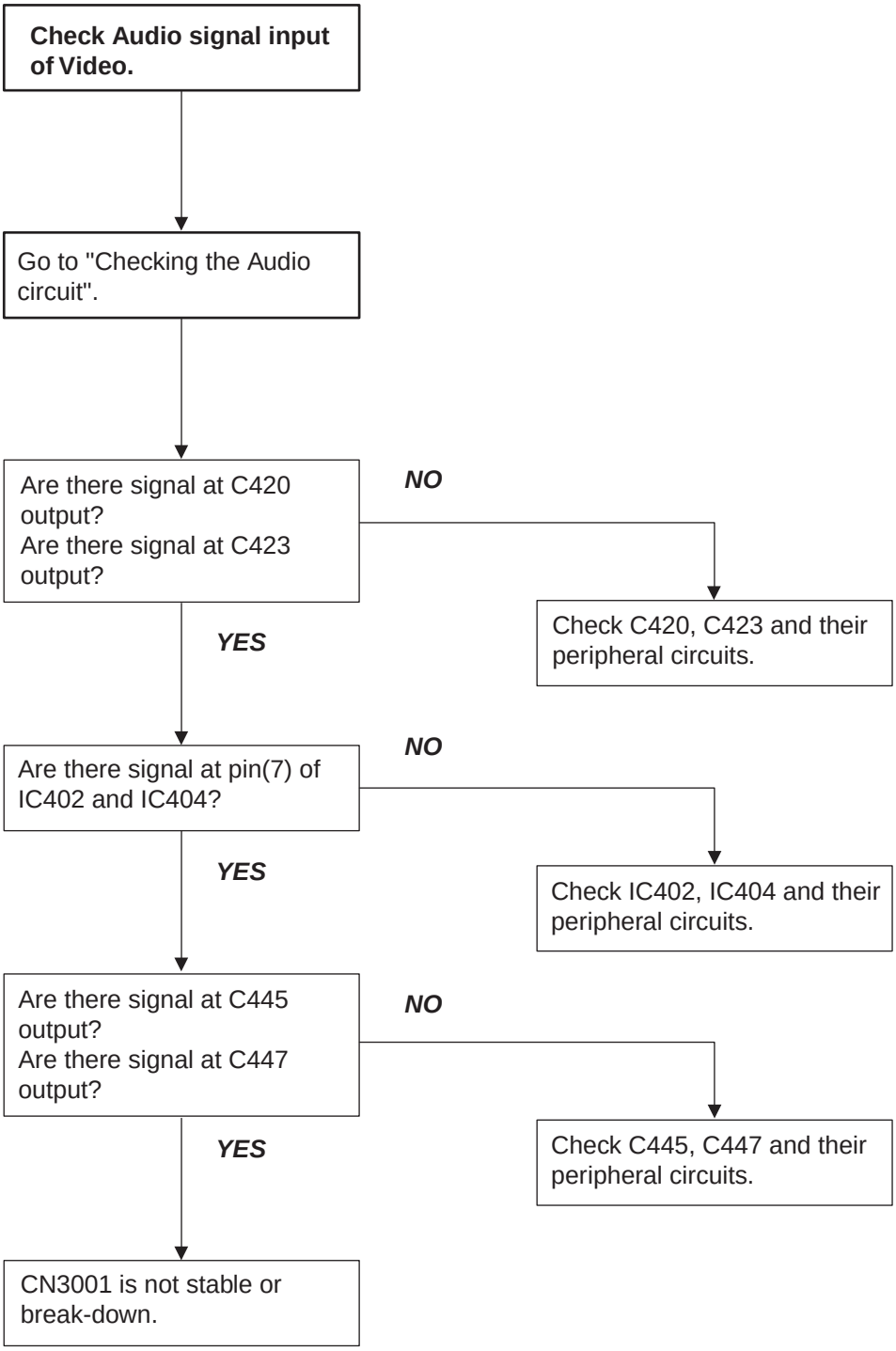
- Color wheel motor/Photosensor
  Cannot be disabled. Connect an extension jig.

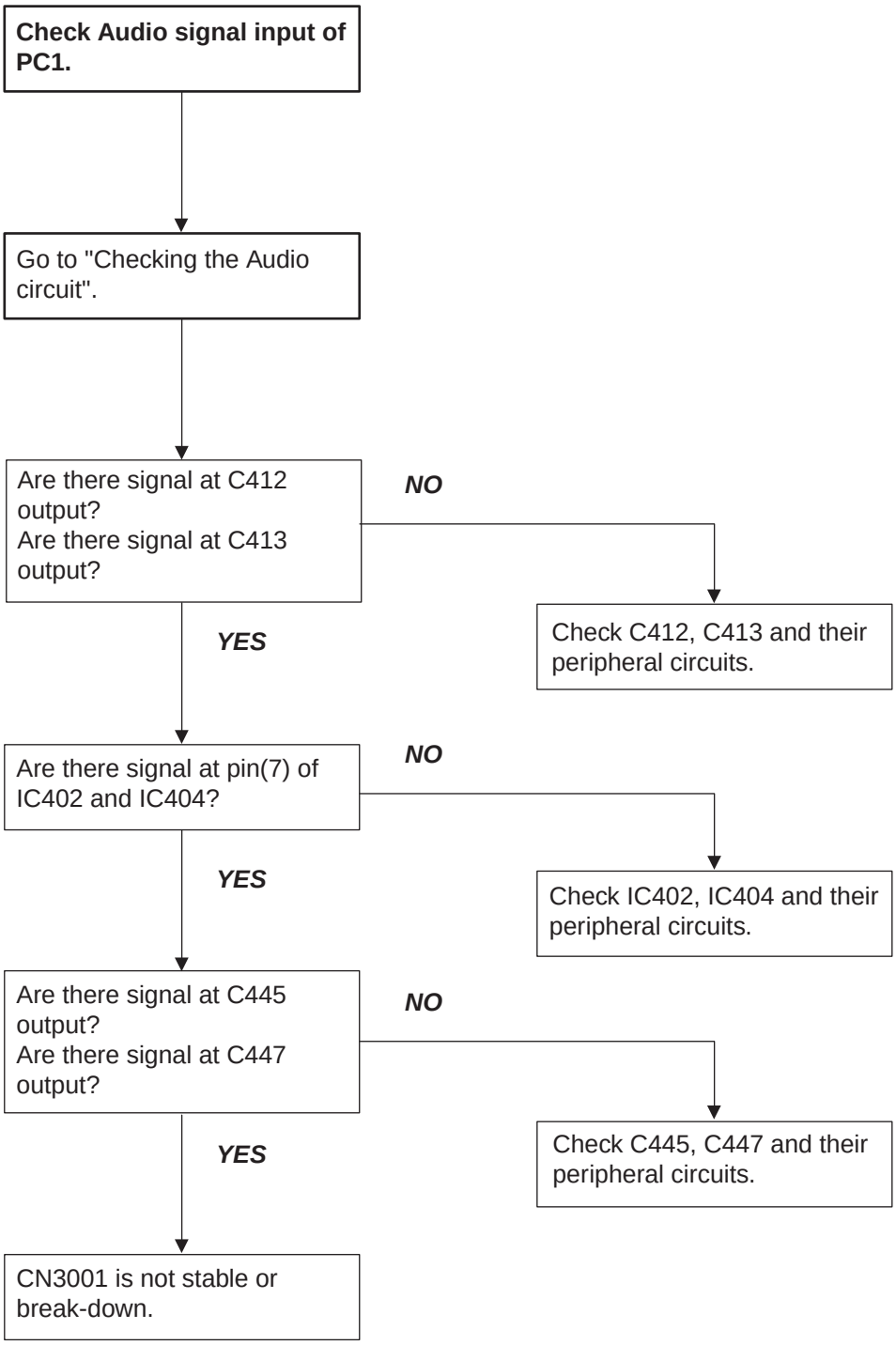
TROUBLESHOOTING TABLE

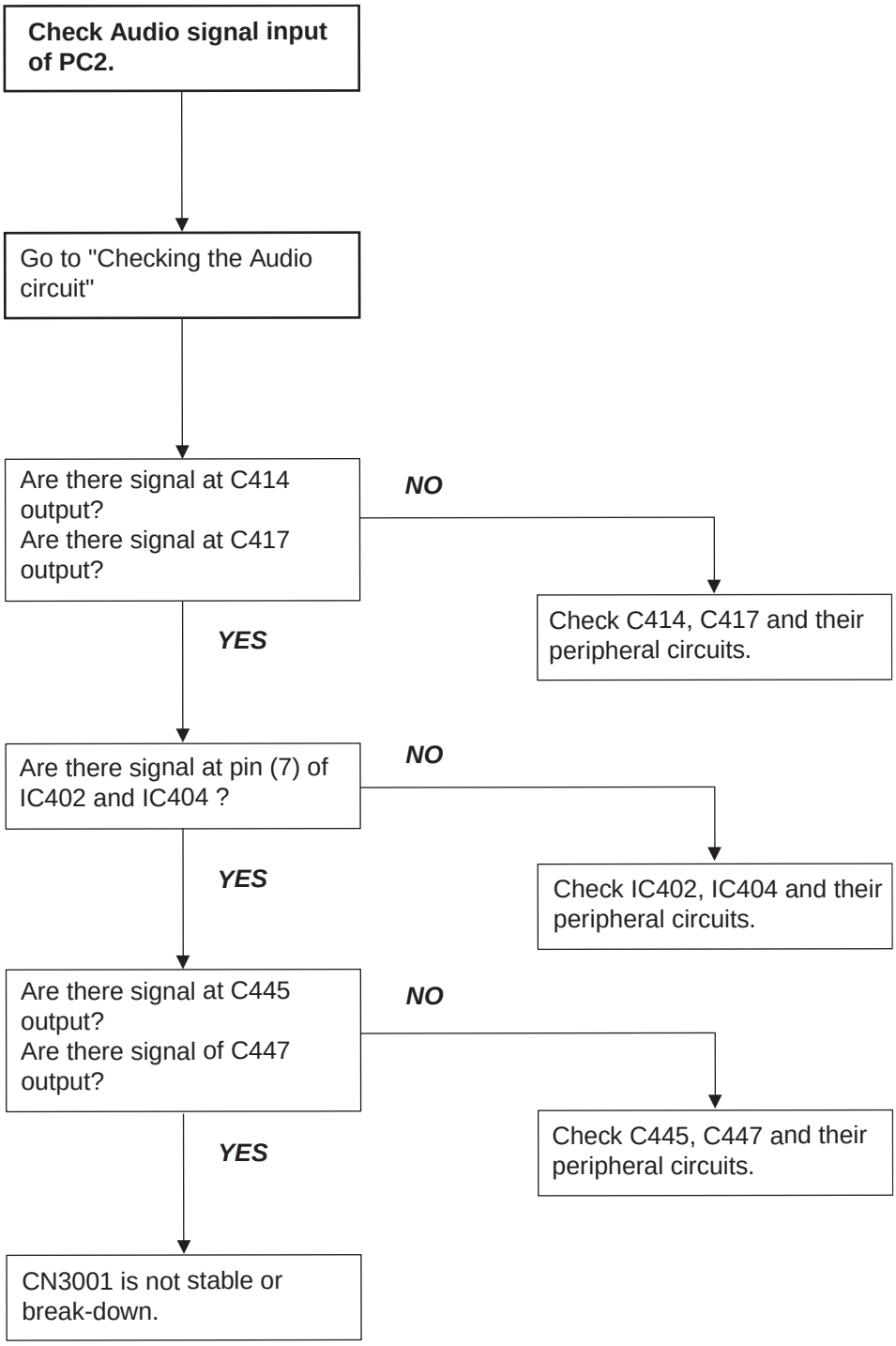


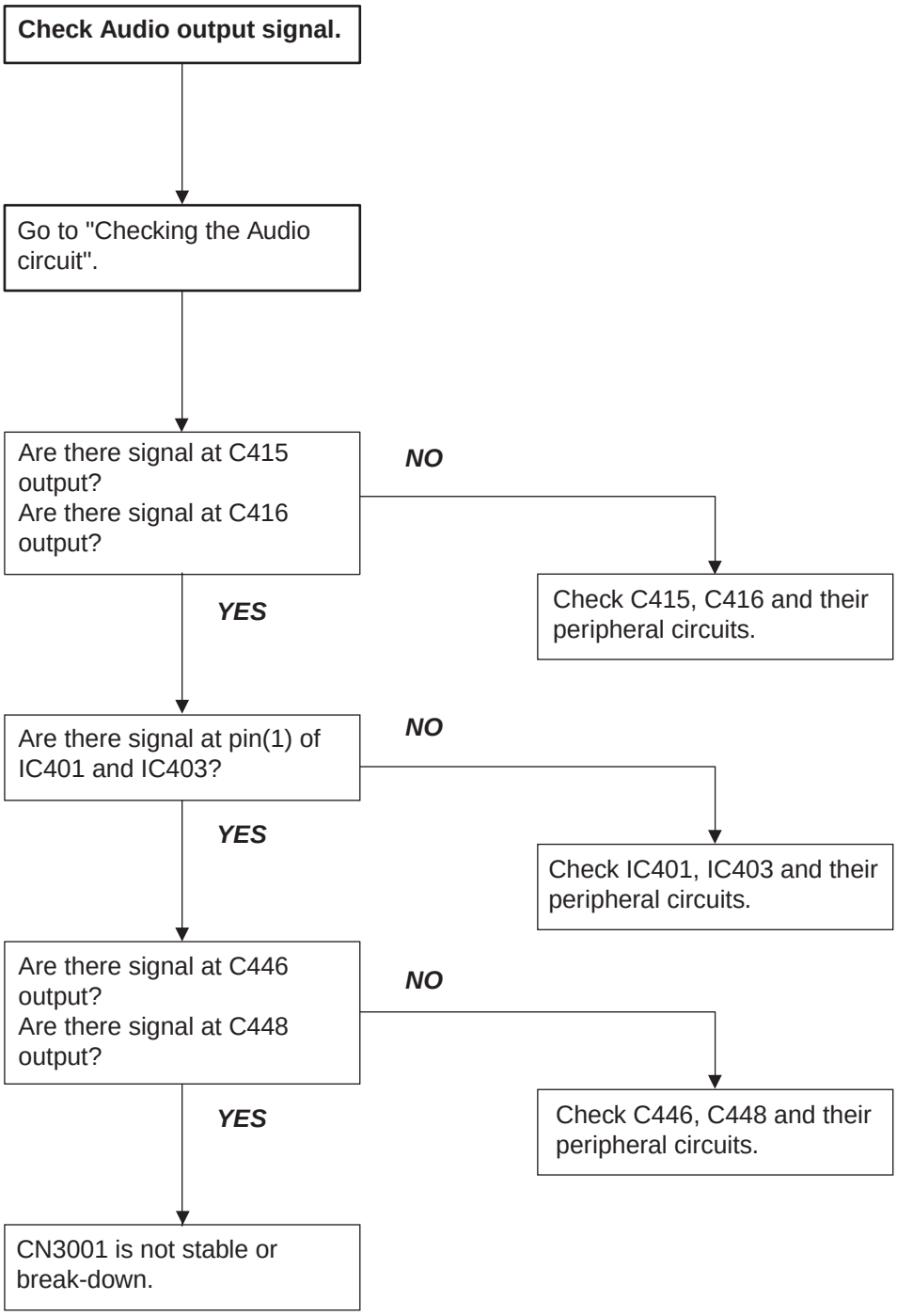

Check S-Video signal input.
Go to "Checking the S-Video signal circuit".
Are there signal "C" at C418 output?
Are there signal "Y" at C419 output?
NO
Check C418, C419 and their peripheral circuits.
YES
Are there signal "C" at emitter of Q414 output?
Are there signal "Y" at emitter of Q415 output?
NO
Check Q414, Q415 and their peripheral circuits.
YES
Are there signal at pin(7) of IC406?
NO
Check IC406 and its peripheral circuits.
YES
CN3001 is not stable or breakdown.

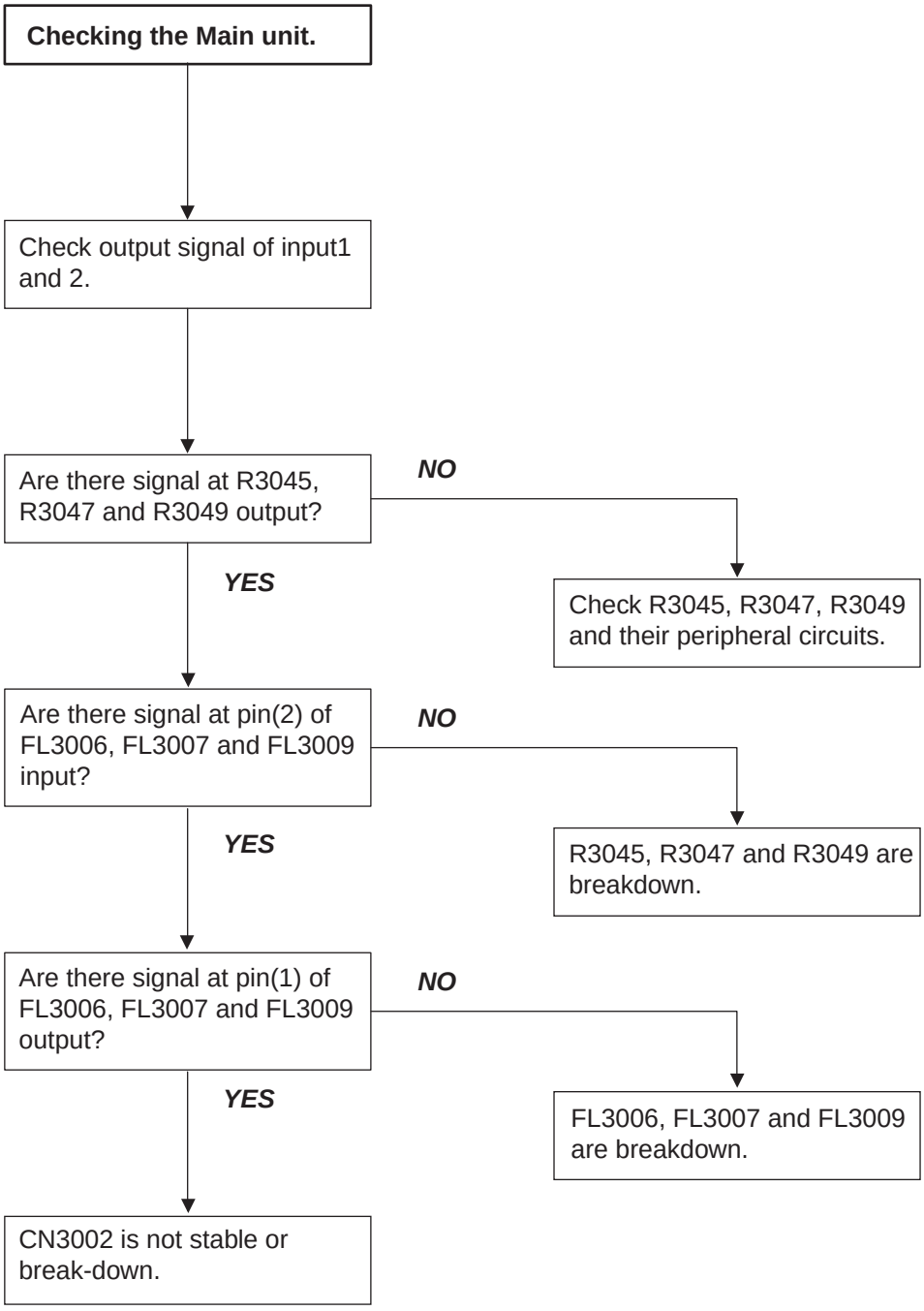

Check Video signal input.
Go to "Checking the Video circuit".
Are there signal at C411 output?
NO
Check C411 and its peripheral circuits.
YES
Are there signal at emitter of Q412 output?
NO
Check Q412 and its peripheral circuits.
YES
Are there signal at pin(5) of IC406?
NO
Check IC406 and its peripheral circuits.
YES
CN3001 is not stable or break-down.

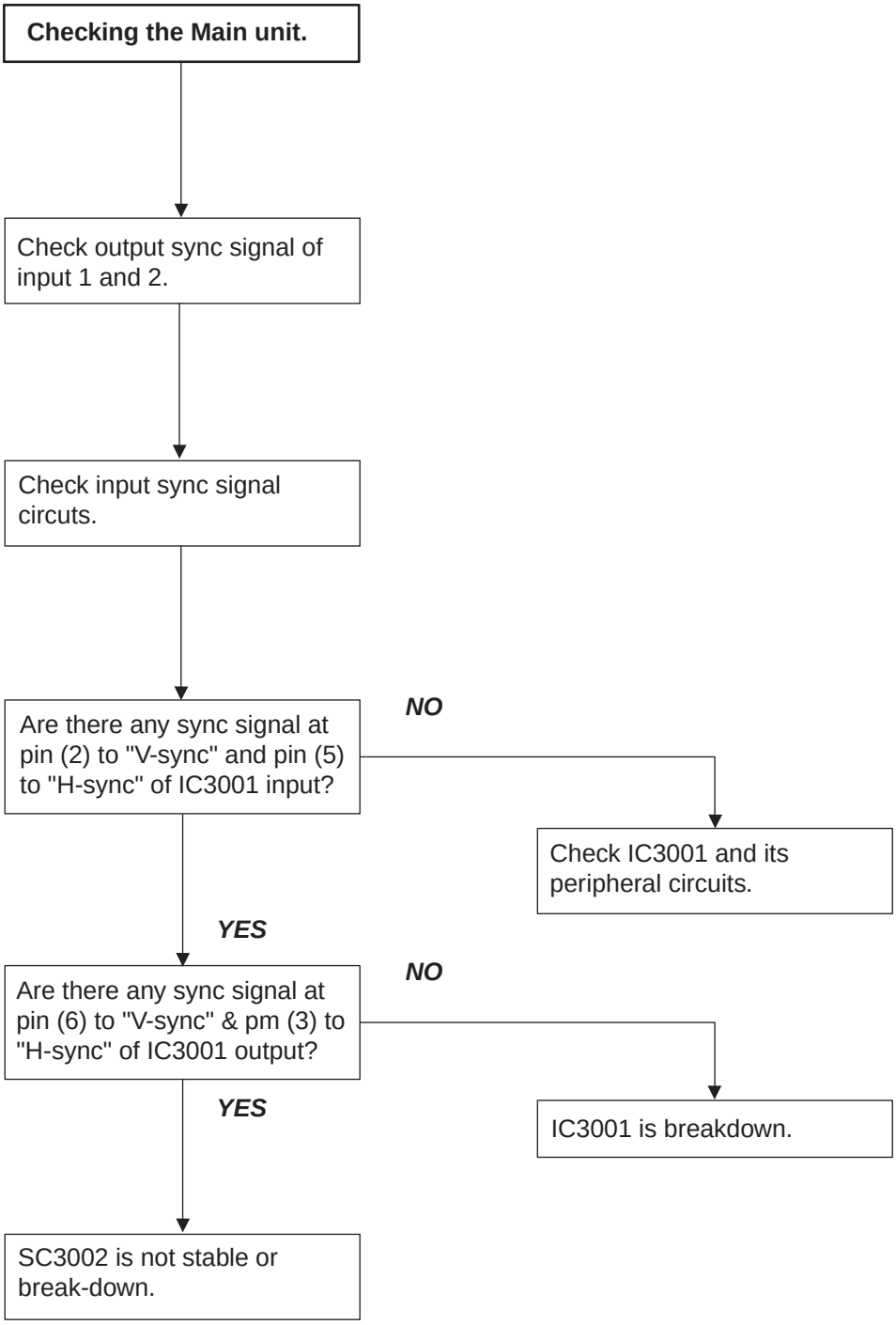

Check Audio signal input of Video.
Go to "Checking the Audio circuit".
Are there signal at C420 output?
Are there signal at C423 output?
NO
Check C420, C423 and their peripheral circuits.
YES
Are there signal at pin(7) of IC402 and IC404?
NO
Check IC402, IC404 and their peripheral circuits.
YES
Are there signal at C445 output?
Are there signal at C447 output?
NO
Check C445, C447 and their peripheral circuits.
YES
CN3001 is not stable or break-down.

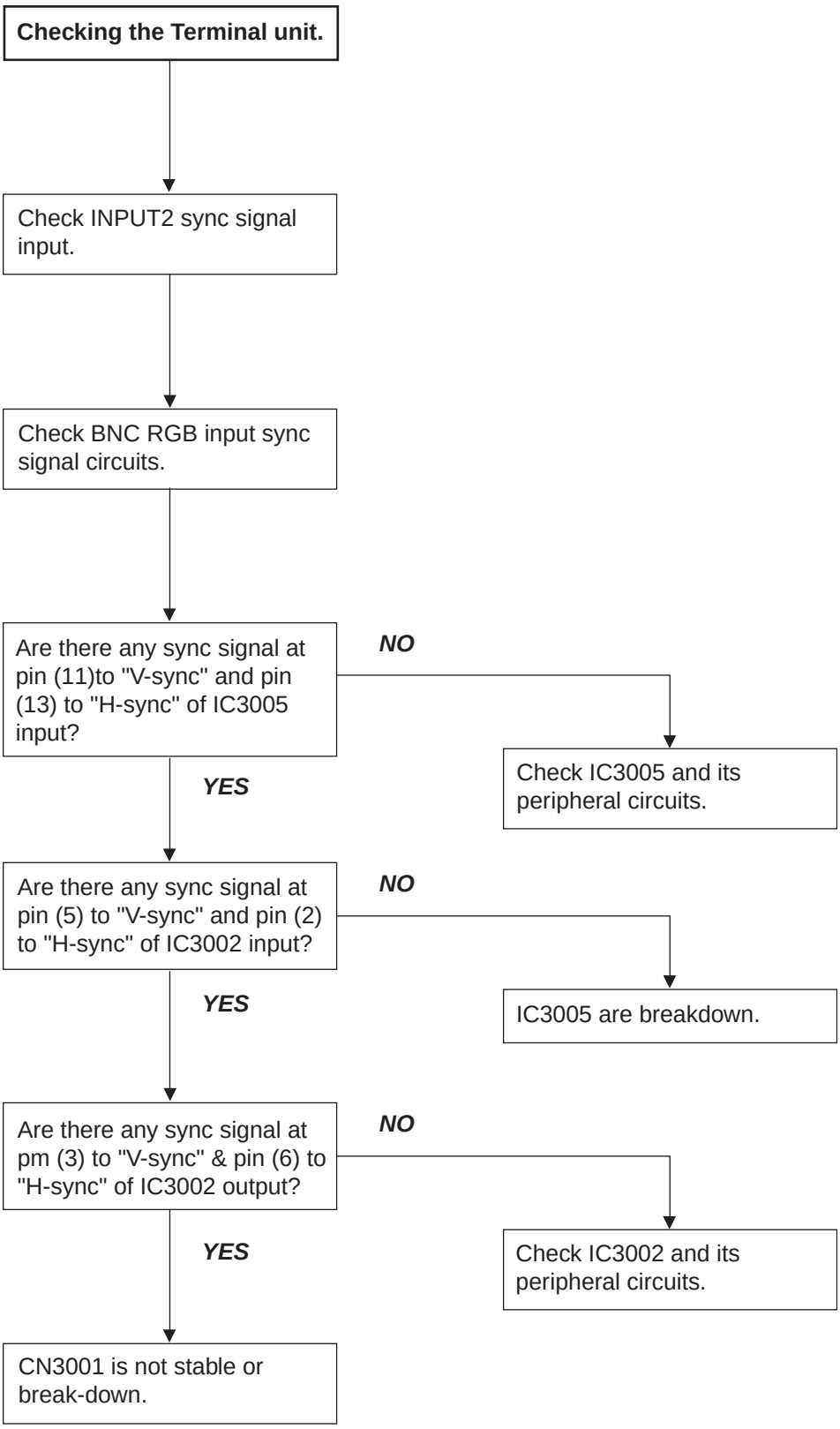

Check Audio signal input of PC1.
Go to "Checking the Audio circuit".
Are there signal at C412 output?
Are there signal at C413 output?
NO
Check C412, C413 and their peripheral circuits.
YES
Are there signal at pin(7) of IC402 and IC404?
NO
Check IC402, IC404 and their peripheral circuits.
YES
Are there signal at C445 output?
Are there signal at C447 output?
NO
Check C445, C447 and their peripheral circuits.
YES
CN3001 is not stable or break-down.

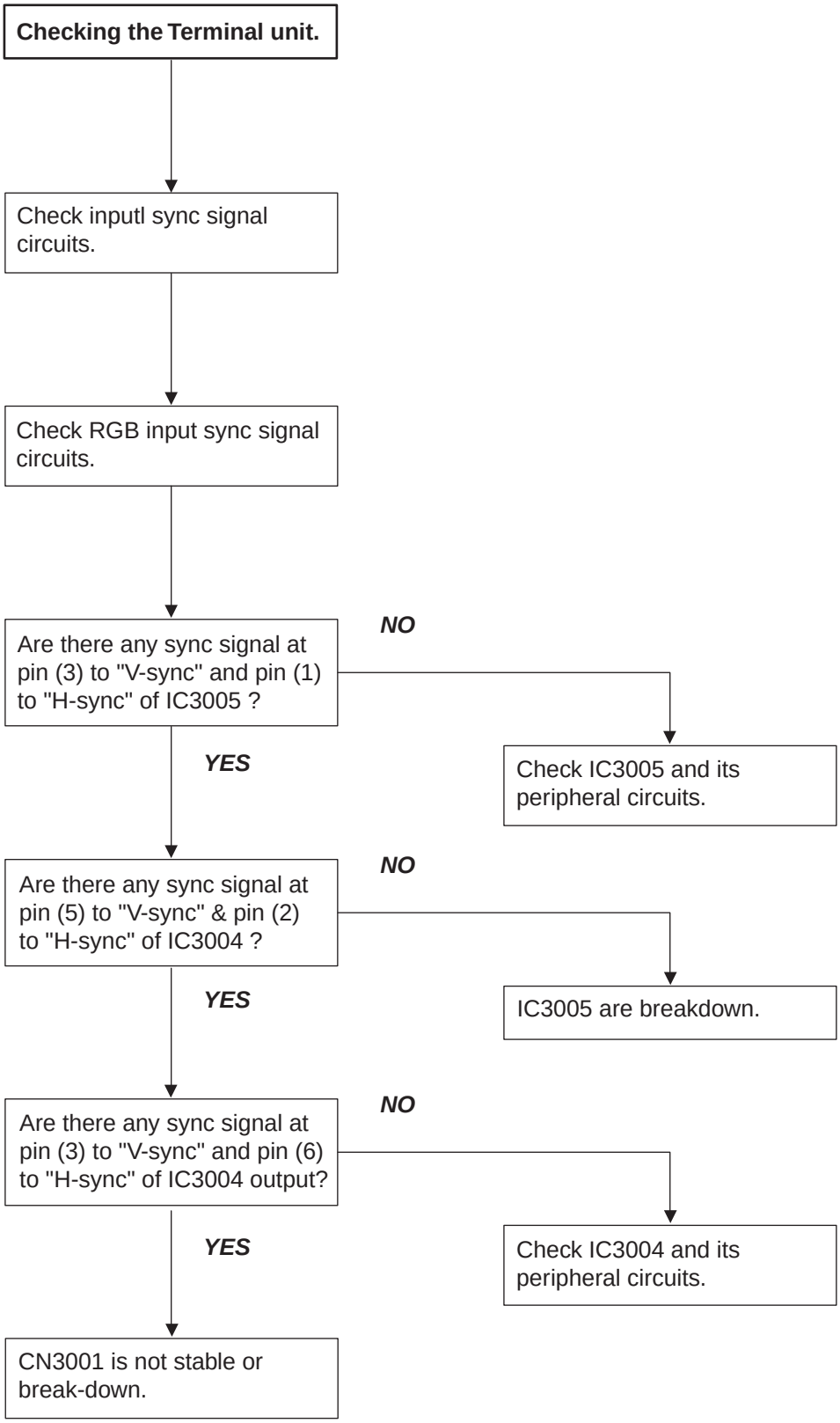

Check Audio signal input of PC2.
Go to "Checking the Audio circuit"
Are there signal at C414 output?
Are there signal at C417 output?
NO
Check C414, C417 and their peripheral circuits.
YES
Are there signal at pin (7) of IC402 and IC404 ?
NO
Check IC402, IC404 and their peripheral circuits.
YES
Are there signal at C445 output?
Are there signal of C447 output?
NO
Check C445, C447 and their peripheral circuits.
YES
CN3001 is not stable or break-down.

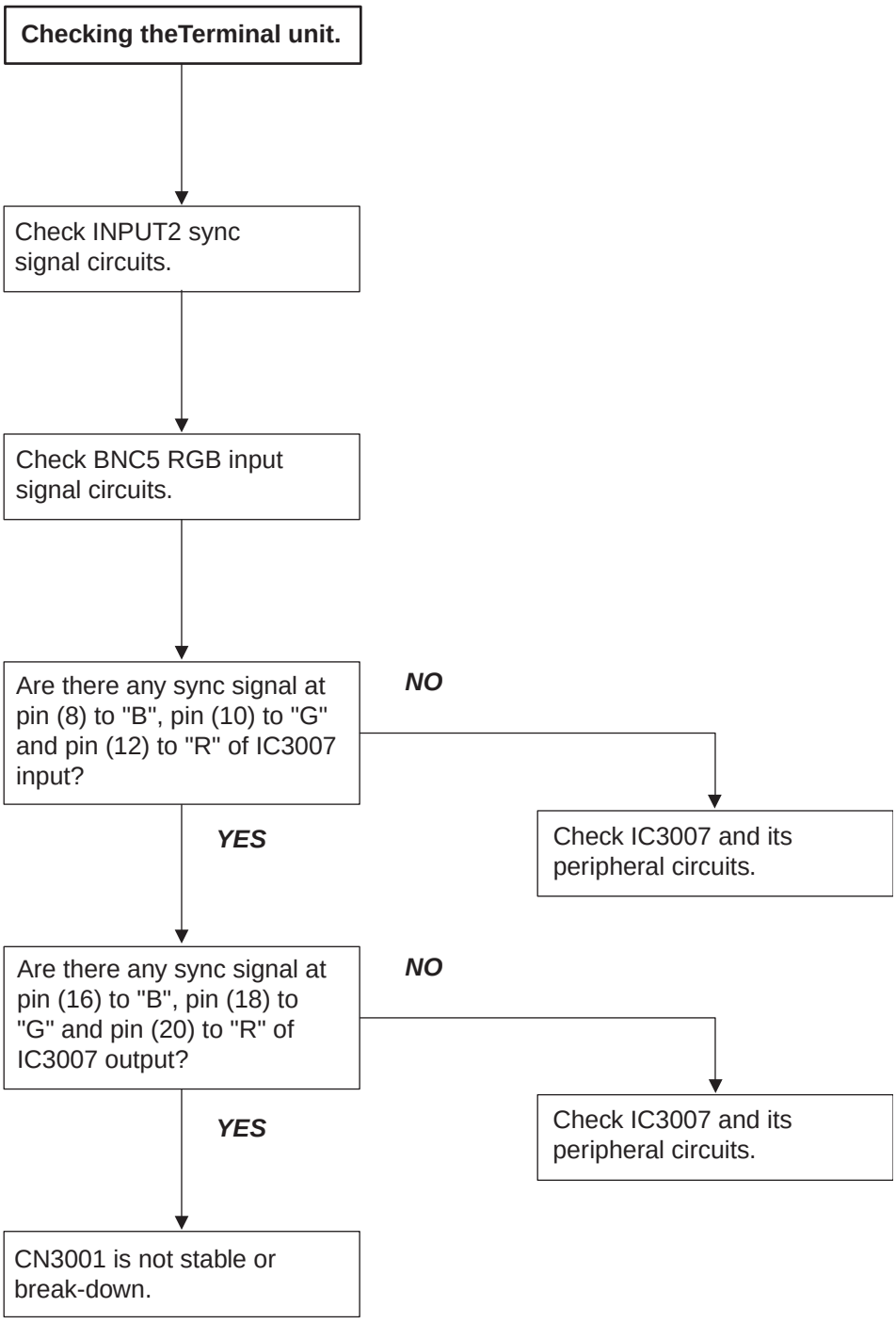

Check Audio output signal.
Go to "Checking the Audio circuit".
Are there signal at C415 output?
Are there signal at C416 output?
NO
Check C415, C416 and their peripheral circuits.
YES
Are there signal at pin(1) of IC401 and IC403?
NO
Check IC401, IC403 and their peripheral circuits.
YES
Are there signal at C446 output?
Are there signal at C448 output?
NO
Check C446, C448 and their peripheral circuits.
YES
CN3001 is not stable or break-down.

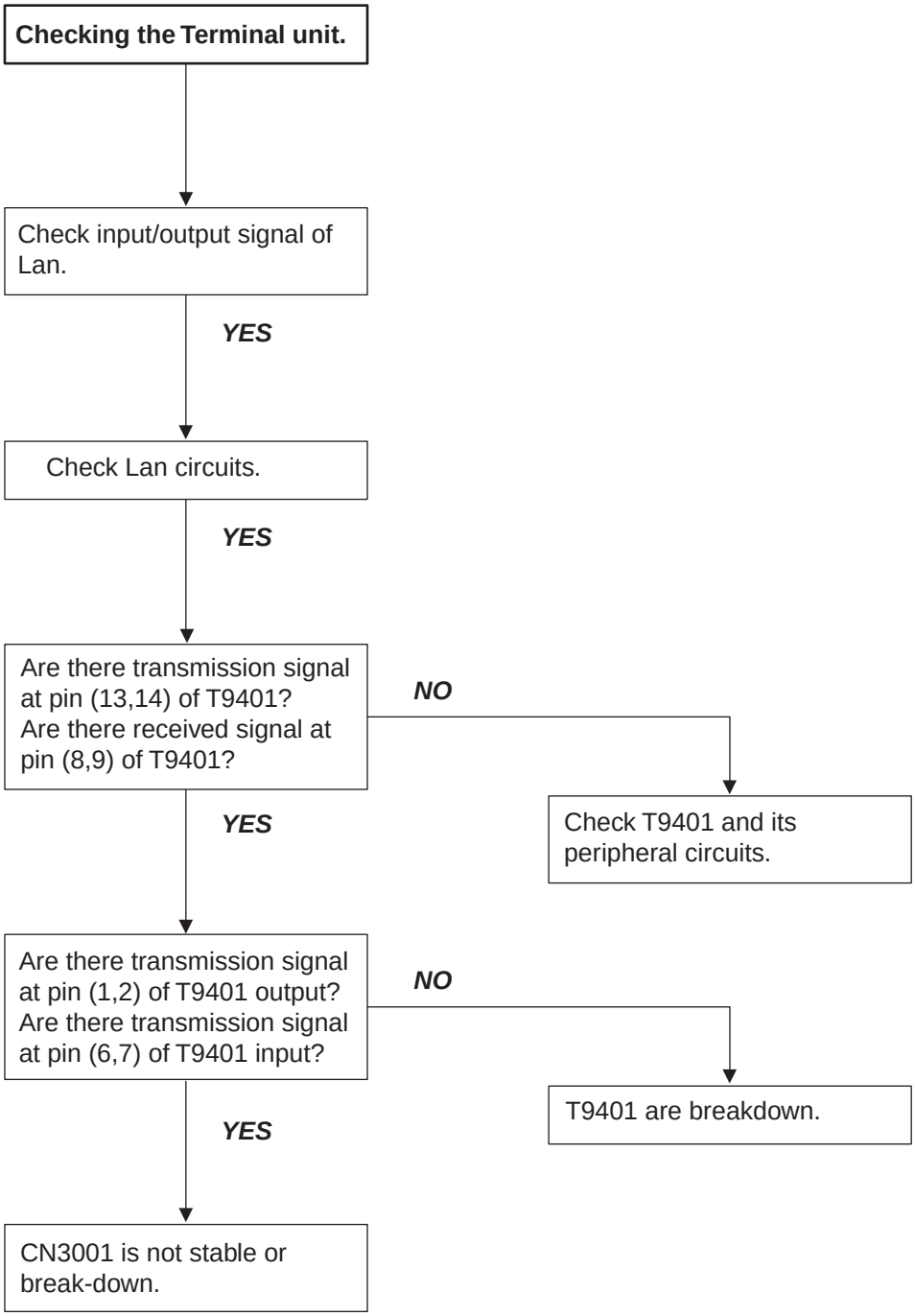

Checking the Main unit.
Check output signal of input1 and 2.
Are there signal at R3045, R3047 and R3049 output?
NO
Check R3045, R3047, R3049 and their peripheral circuits.
YES
Are there signal at pin(2) of FL3006, FL3007 and FL3009 input?
NO
R3045, R3047 and R3049 are breakdown.
YES
Are there signal at pin(1) of FL3006, FL3007 and FL3009 output?
NO
FL3006, FL3007 and FL3009 are breakdown.
YES
CN3002 is not stable or break-down.

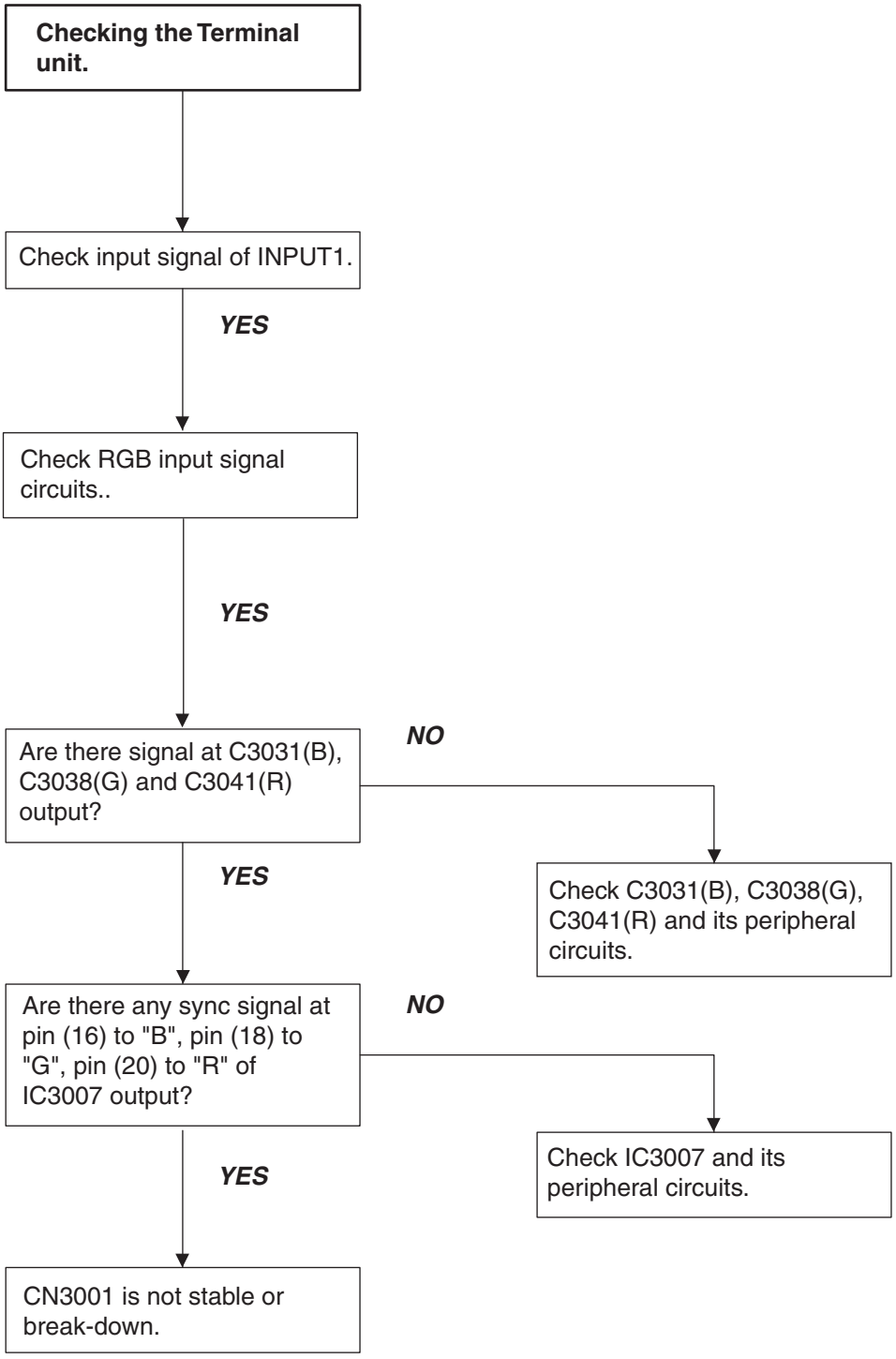

Checking the Main unit.
Check output sync signal of input 1 and 2.
Check input sync signal circuts.
Are there any sync signal at pin (2) to "V-sync" and pin (5) to "H-sync" of IC3001 input?
NO
Check IC3001 and its peripheral circuits.
YES
Are there any sync signal at pin (6) to "V-sync" & pm (3) to "H-sync" of IC3001 output?
NO
IC3001 is breakdown.
YES
SC3002 is not stable or break-down.

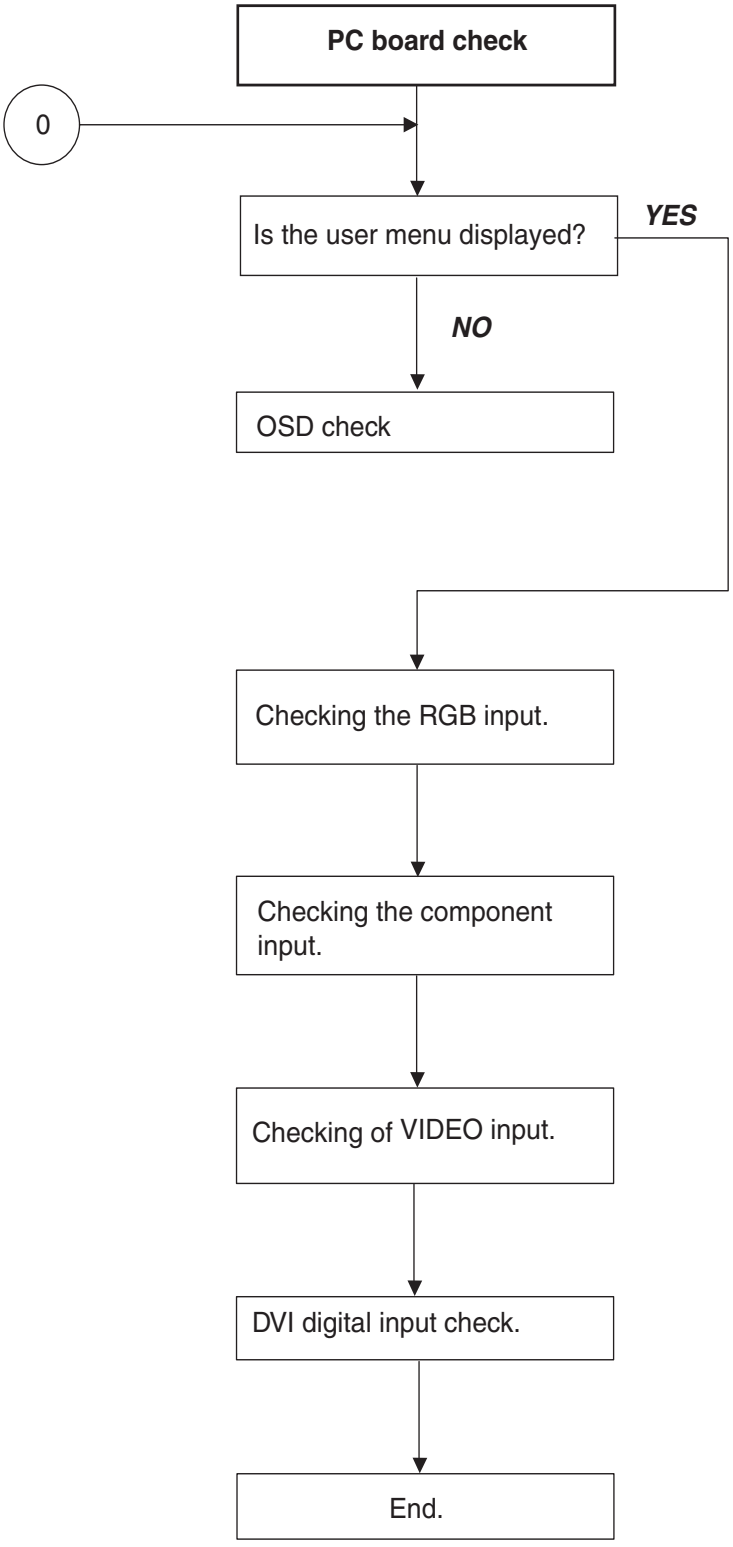

Checking the Terminal unit.
Check INPUT2 sync signal input.
Check BNC RGB input sync signal circuits.
Are there any sync signal at pin (11)to "V-sync" and pin (13) to "H-sync" of IC3005 input?
NO
Check IC3005 and its peripheral circuits.
YES
Are there any sync signal at pin (5) to "V-sync" and pin (2) to "H-sync" of IC3002 input?
NO
IC3005 are breakdown.
YES
Are there any sync signal at pm (3) to "V-sync" & pin (6) to "H-sync" of IC3002 output?
NO
Check IC3002 and its peripheral circuits.
YES
CN3001 is not stable or break-down.

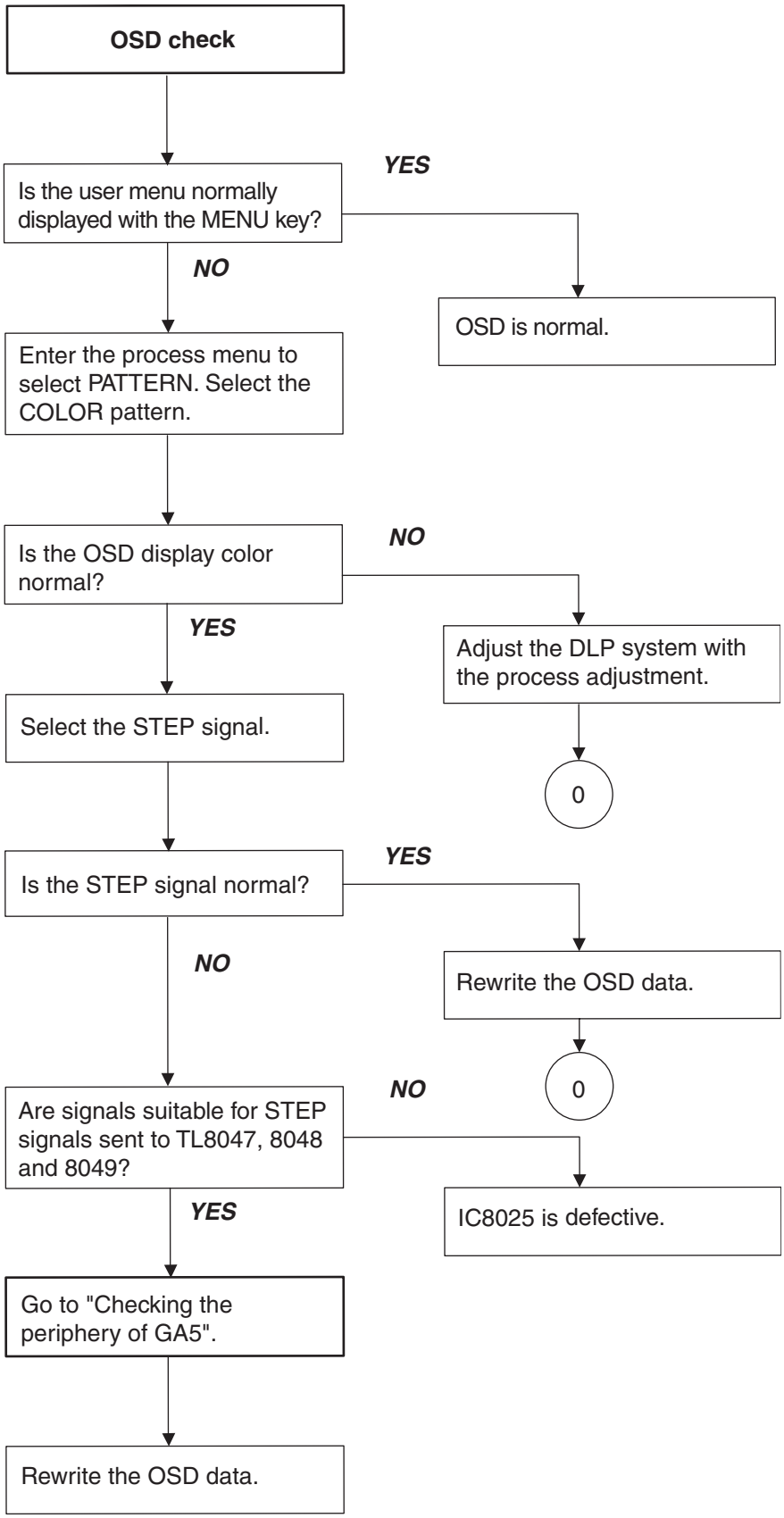

Checking the Terminal unit.
Check inputl sync signal circuits.
Check RGB input sync signal circuits.
Are there any sync signal at pin (3) to "V-sync" and pin (1) to "H-sync" of IC3005 ?
NO
YES
Check IC3005 and its peripheral circuits.
Are there any sync signal at pin (5) to "V-sync" & pin (2) to "H-sync" of IC3004 ?
NO
YES
IC3005 are breakdown.
Are there any sync signal at pin (3) to "V-sync" and pin (6) to "H-sync" of IC3004 output?
NO
YES
Check IC3004 and its peripheral circuits.
CN3001 is not stable or break-down.

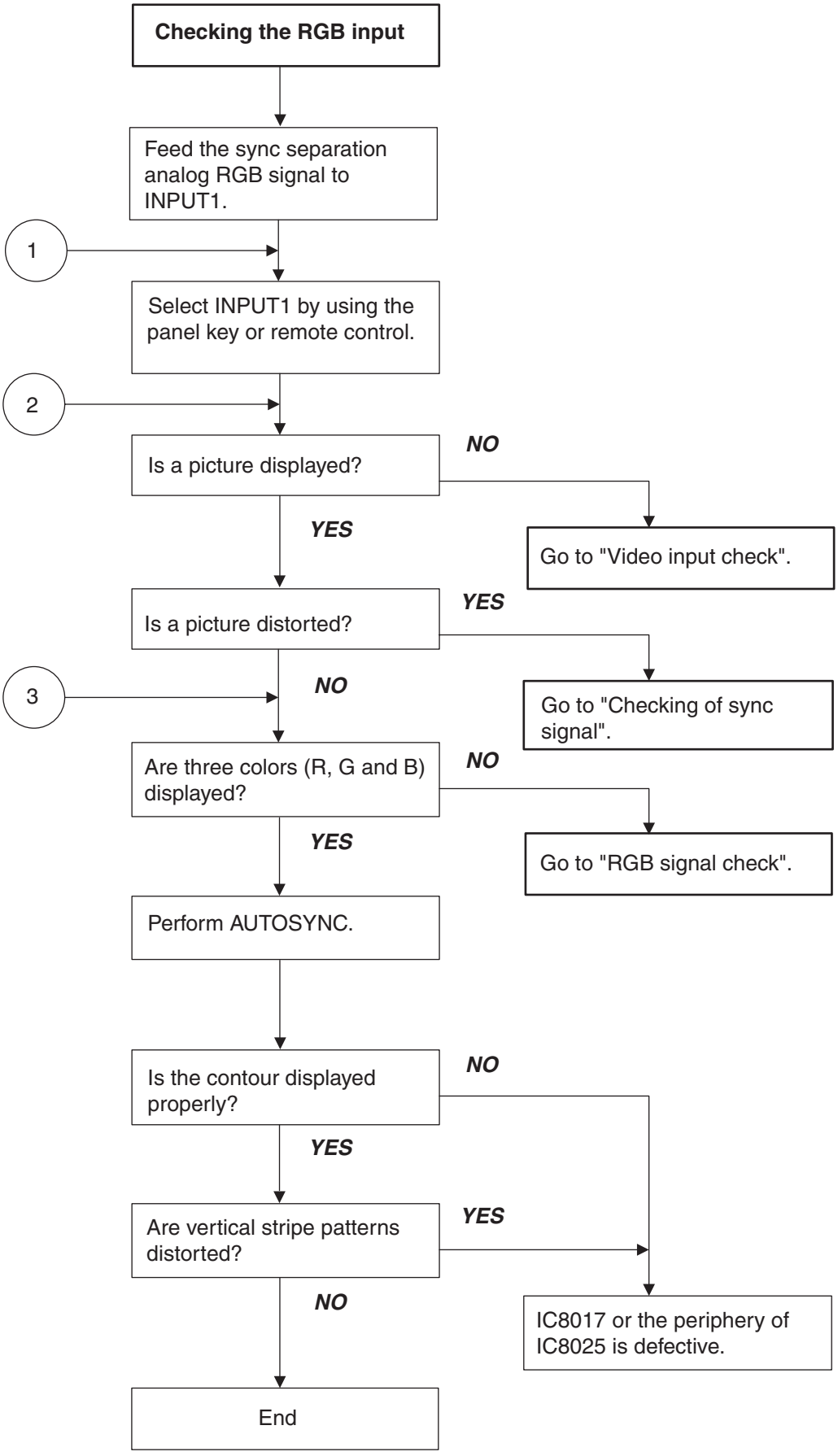

Checking theTerminal unit.
Check INPUT2 sync signal circuits.
Check BNC5 RGB input signal circuits.
Are there any sync signal at pin (8) to "B", pin (10) to "G" and pin (12) to "R" of IC3007 input?
NO
YES
Check IC3007 and its peripheral circuits.
Are there any sync signal at pin (16) to "B", pin (18) to "G" and pin (20) to "R" of IC3007 output?
NO
YES
Check IC3007 and its peripheral circuits.
CN3001 is not stable or break-down.

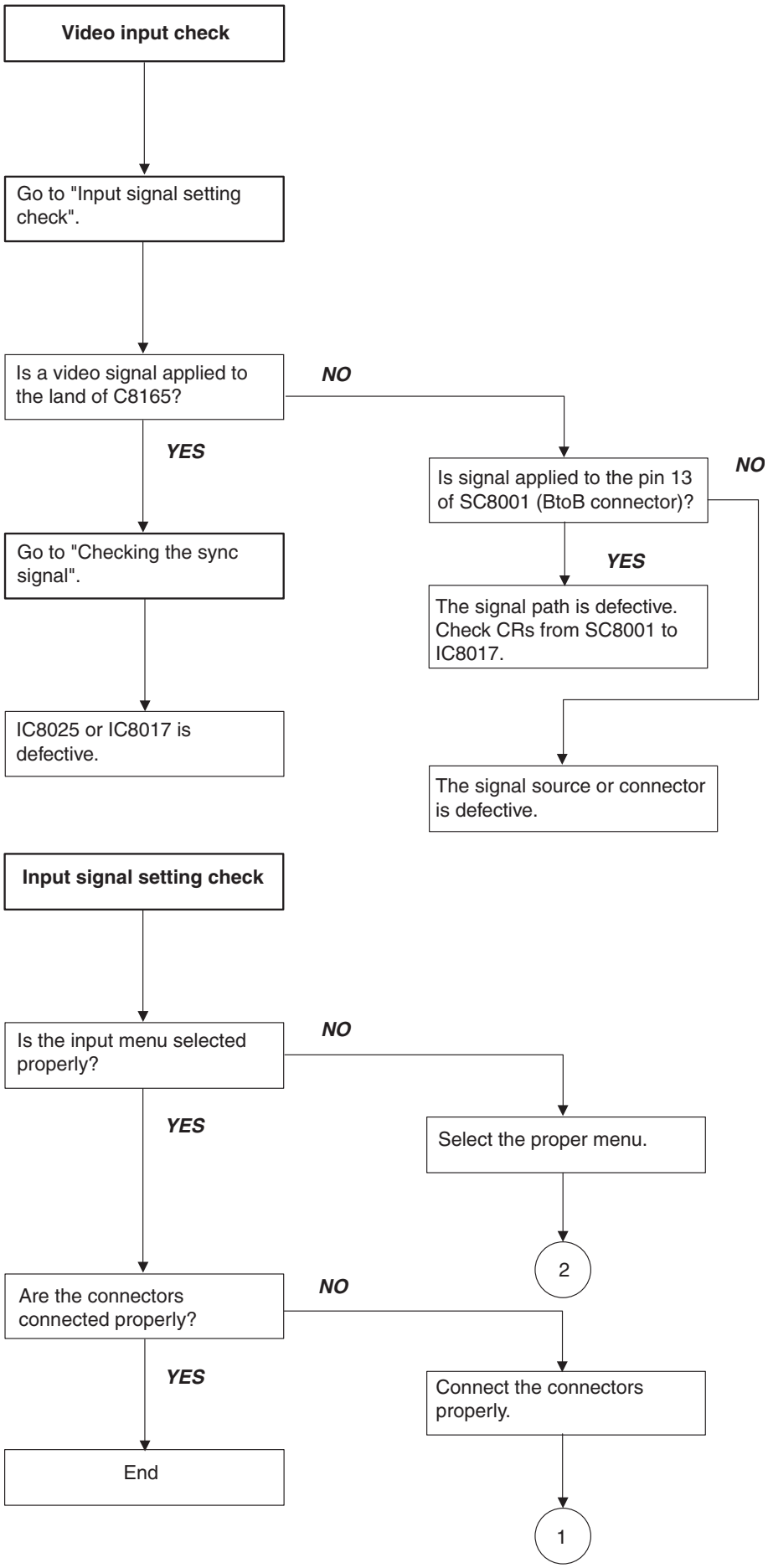

Checking the Terminal unit.
Check input/output signal of Lan.
YES
Check Lan circuits.
YES
Are there transmission signal at pin (13,14) of T9401?
Are there received signal at pin (8,9) of T9401?
NO
Check T9401 and its peripheral circuits.
YES
Are there transmission signal at pin (1,2) of T9401 output?
Are there transmission signal at pin (6,7) of T9401 input?
NO
T9401 are breakdown.
YES
CN3001 is not stable or break-down.

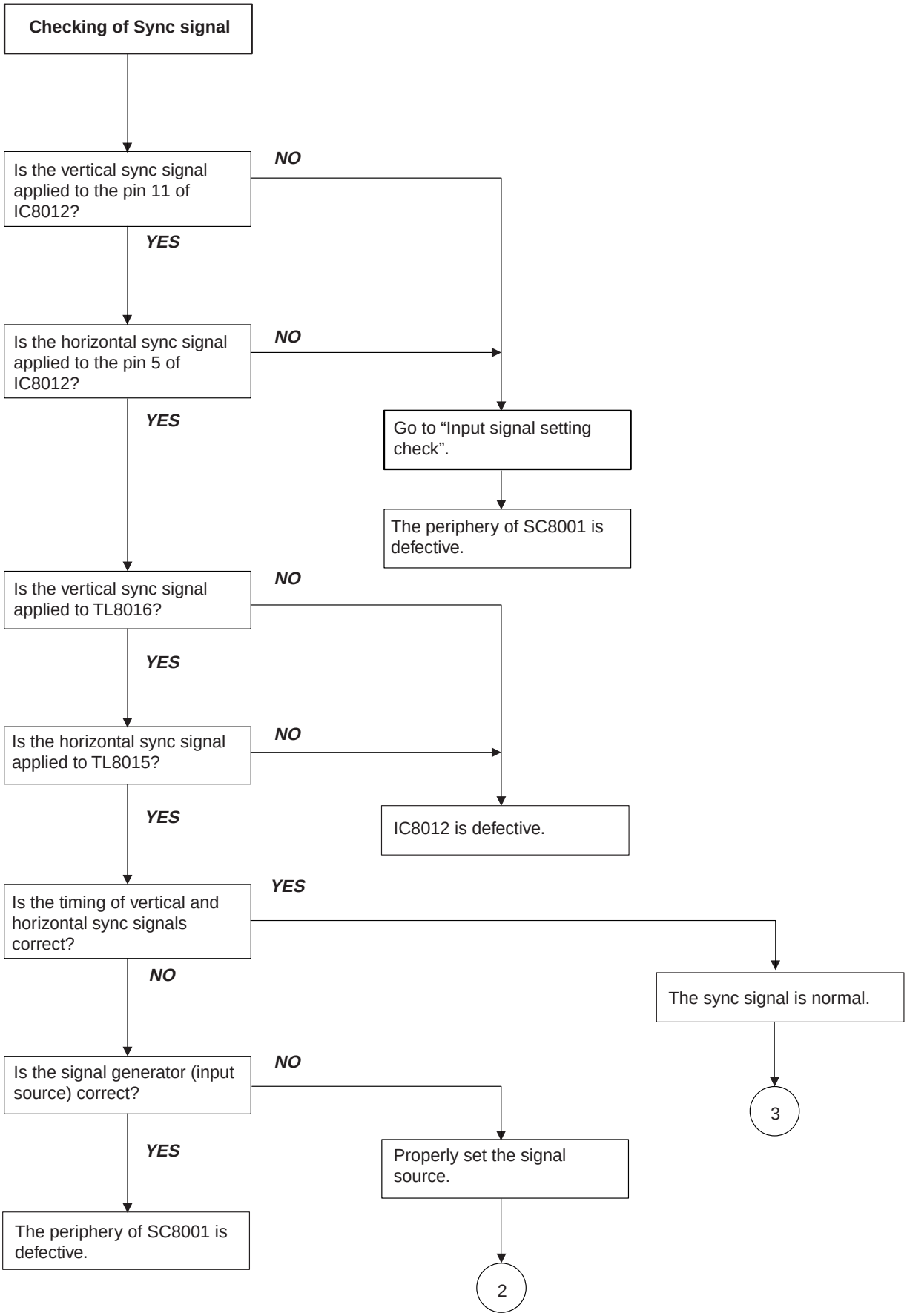

Checking the Terminal unit.
Check input signal of INPUT1.
YES
Check RGB input signal circuits..
YES
Are there signal at C3031(B), C3038(G) and C3041(R) output?
NO
Check C3031(B), C3038(G), C3041(R) and its peripheral circuits.
YES
Are there any sync signal at pin (16) to "B", pin (18) to "G", pin (20) to "R" of IC3007 output?
NO
Check IC3007 and its peripheral circuits.
YES
CN3001 is not stable or break-down.

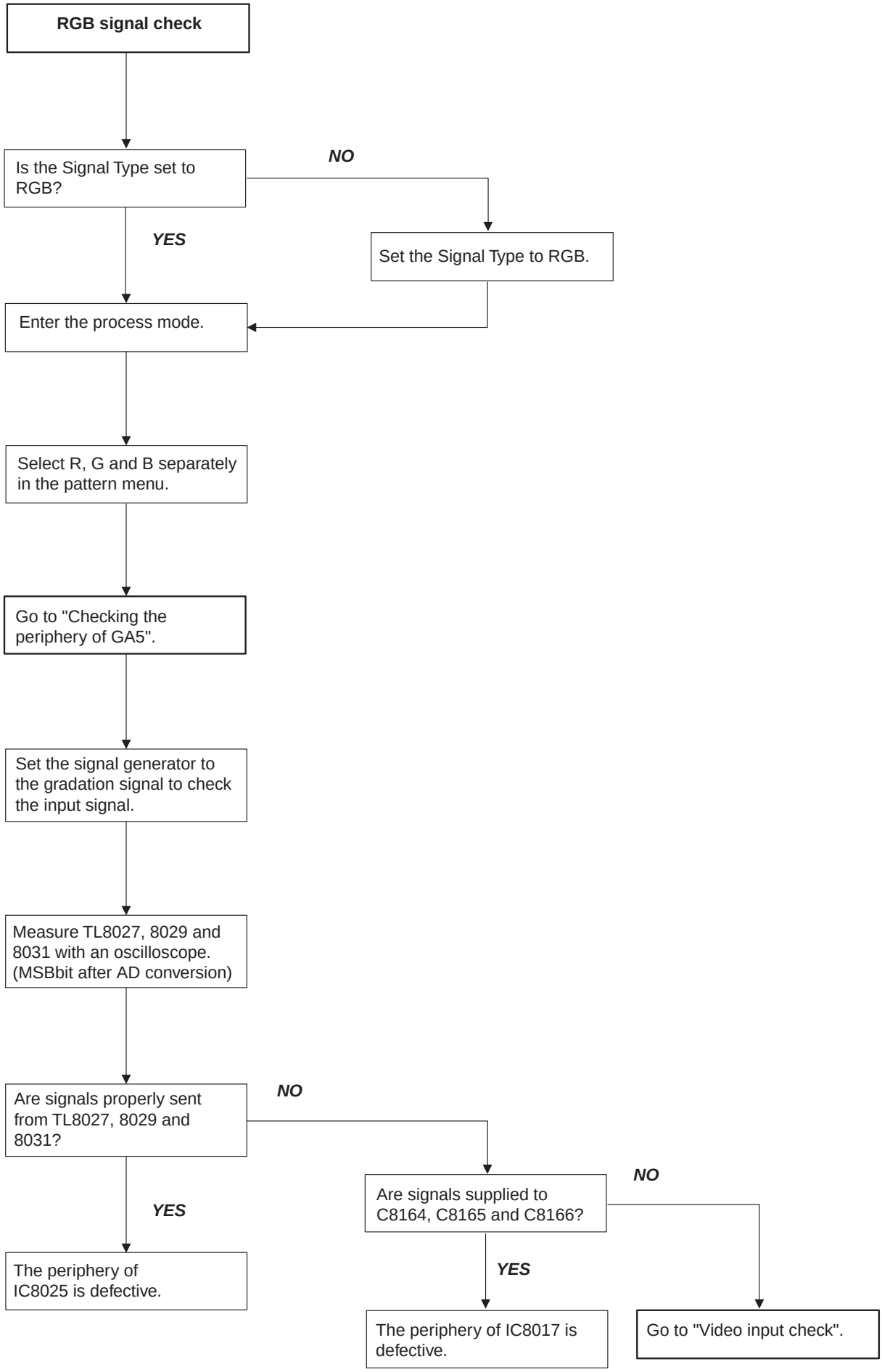

PC board check
0
Is the user menu displayed?
YES
NO
OSD check
Checking the RGB input.
Checking the component input.
Checking of VIDEO input.
DVI digital input check.
End.

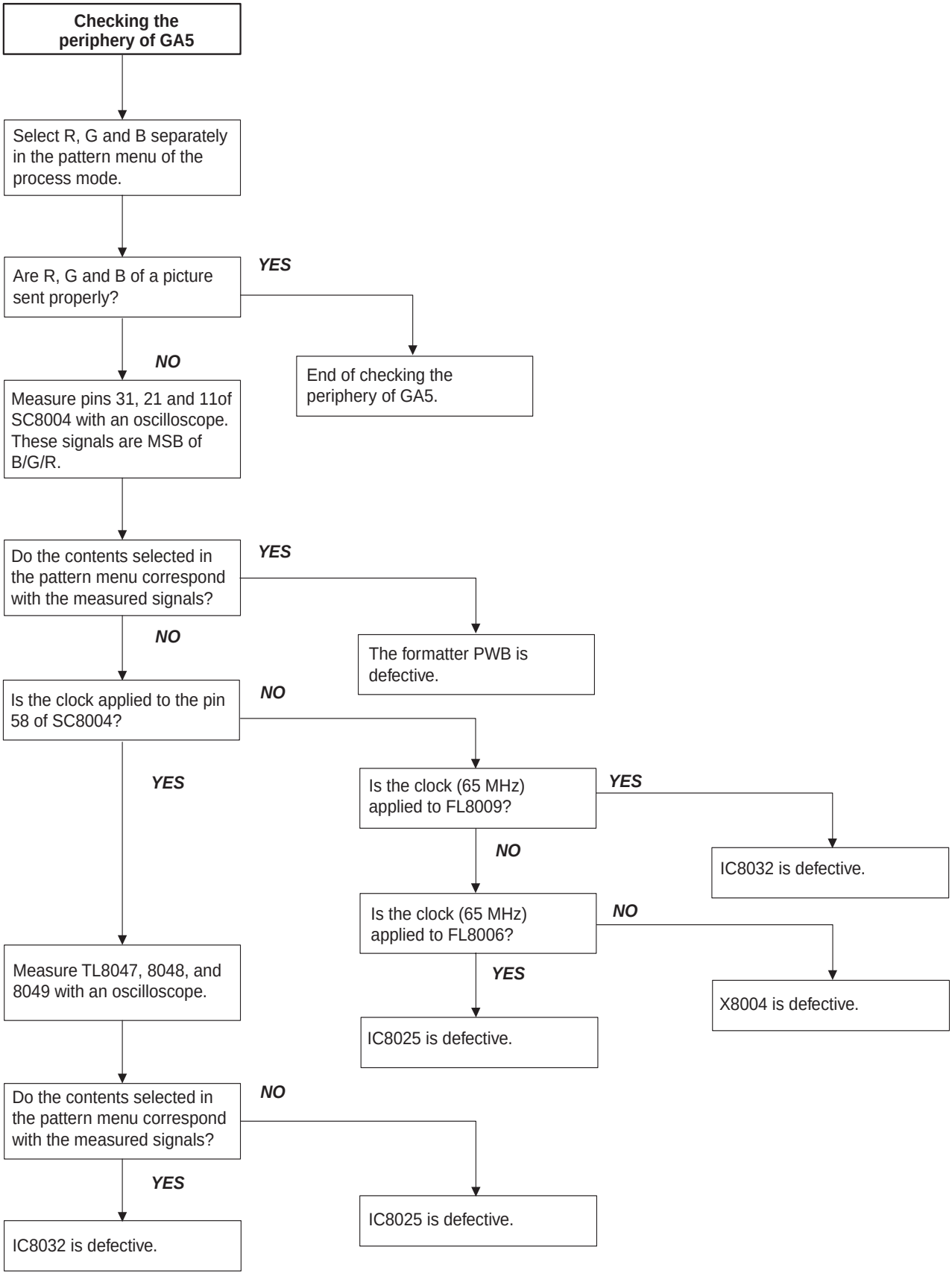

OSD check
Is the user menu normally displayed with the MENU key?
YES
NO
OSD is normal.
Enter the process menu to select PATTERN. Select the COLOR pattern.
Is the OSD display color normal?
NO
YES
Adjust the DLP system with the process adjustment.
Select the STEP signal.
0
Is the STEP signal normal?
YES
NO
Rewrite the OSD data.
0
Are signals suitable for STEP signals sent to TL8047, 8048 and 8049?
NO
YES
IC8025 is defective.
Go to "Checking the periphery of GA5".
Rewrite the OSD data.

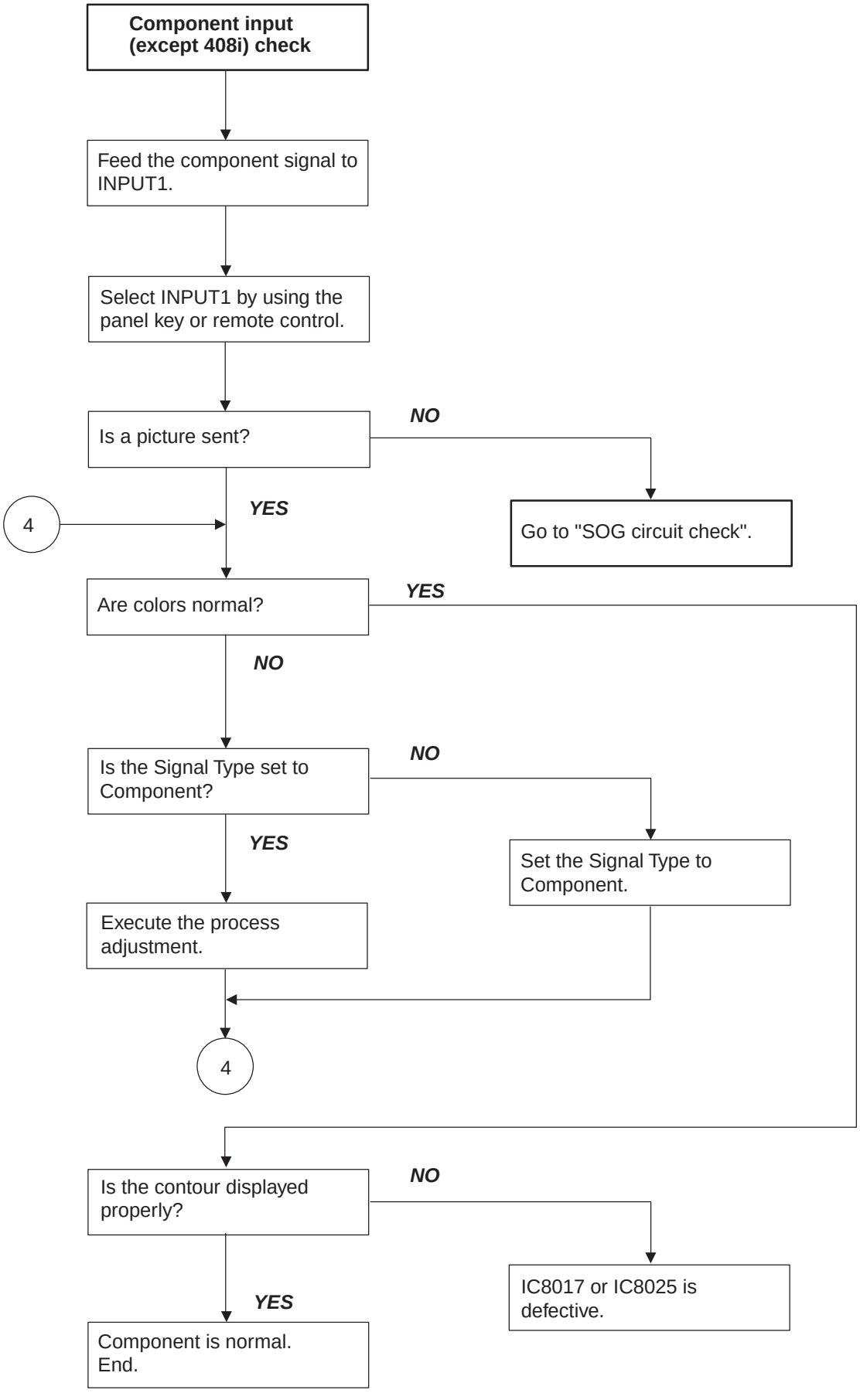

Checking the RGB input
Feed the sync separation analog RGB signal to INPUT1.
1
Select INPUT1 by using the panel key or remote control.
2
Is a picture displayed?
NO
Go to "Video input check".
YES
Is a picture distorted?
YES
Go to "Checking of sync signal".
NO
3
Are three colors (R, G and B) displayed?
NO
Go to "RGB signal check".
YES
Perform AUTOSYNC.
Is the contour displayed properly?
NO
YES
Are vertical stripe patterns distorted?
YES
IC8017 or the periphery of IC8025 is defective.
NO
End

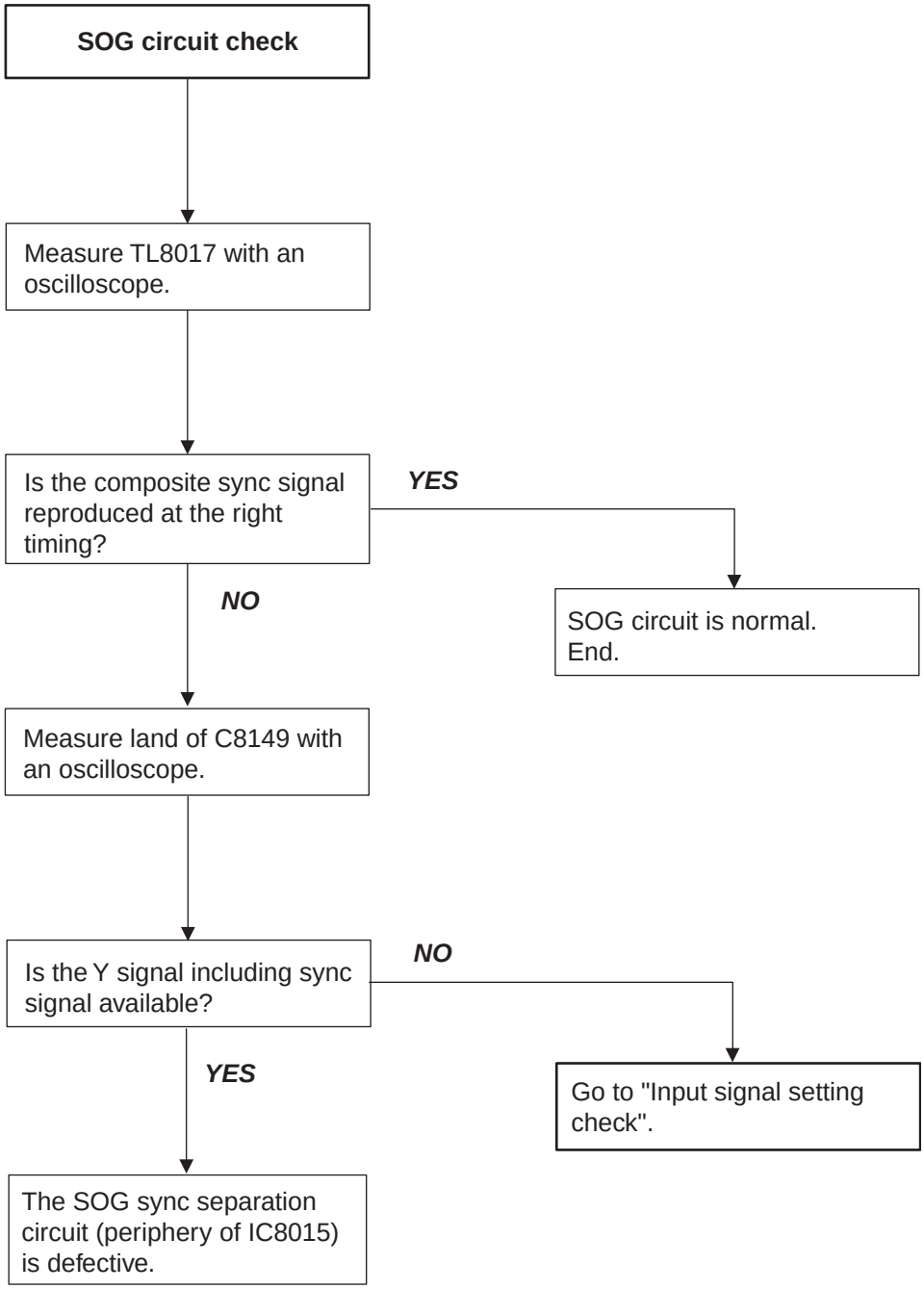

Video input check
Go to "Input signal setting check".
Is a video signal applied to the land of C8165?
NO
YES
Is signal applied to the pin 13 of SC8001 (BtoB connector)?
NO
YES
Go to "Checking the sync signal".
The signal path is defective. Check CRs from SC8001 to IC8017.
IC8025 or IC8017 is defective.
The signal source or connector is defective.
Input signal setting check
Is the input menu selected properly?
NO
YES
Select the proper menu.
2
Are the connectors connected properly?
NO
YES
Connect the connectors properly.
End
1

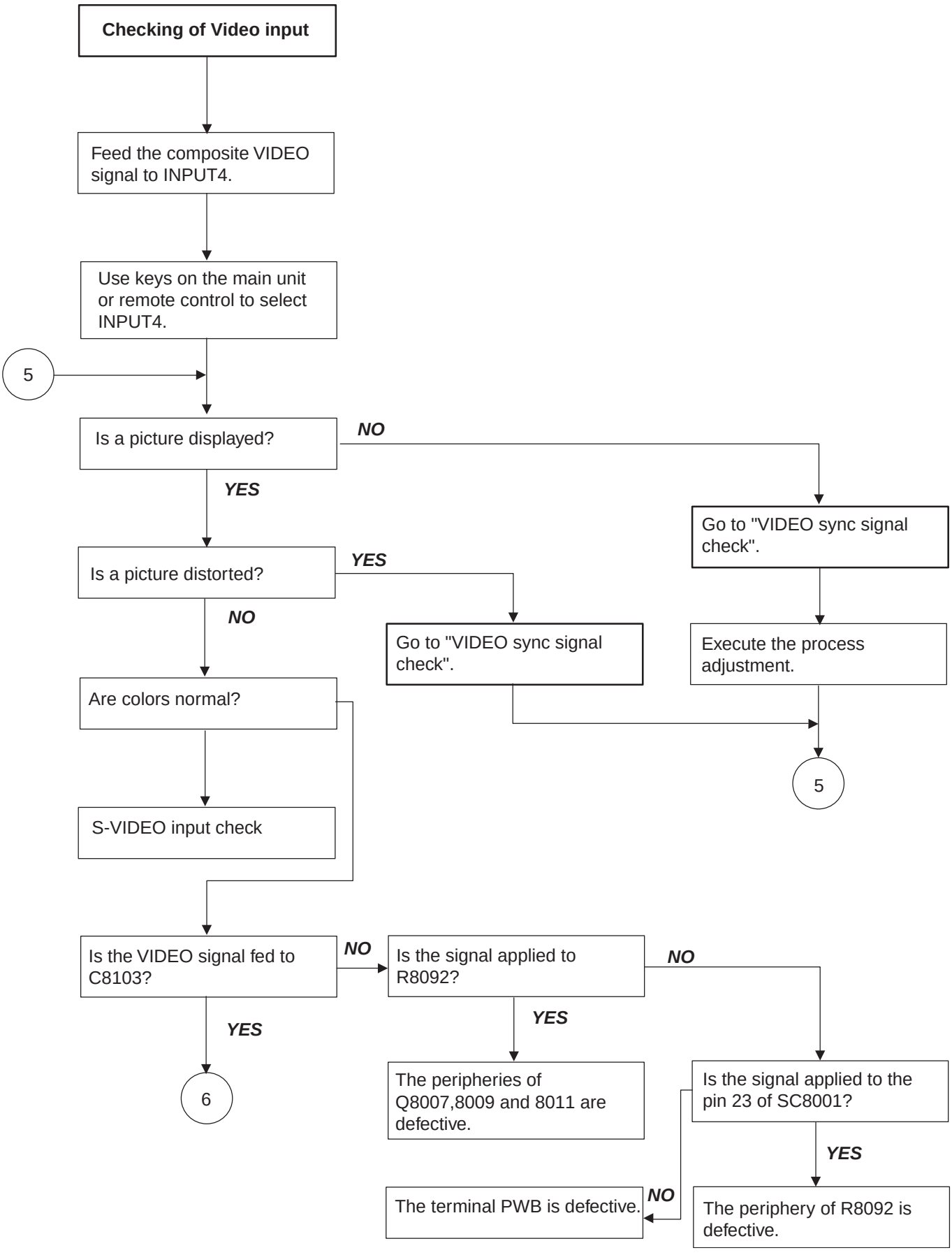

Checking of Sync signal
Is the vertical sync signal applied to the pin 11 of IC8012?
NO
YES
Is the horizontal sync signal applied to the pin 5 of IC8012?
NO
YES
Go to “Input signal setting check”.
The periphery of SC8001 is defective.
Is the vertical sync signal applied to TL8016?
NO
YES
Is the horizontal sync signal applied to TL8015?
NO
YES
IC8012 is defective.
Is the timing of vertical and horizontal sync signals correct?
YES
NO
The sync signal is normal.
3
Is the signal generator (input source) correct?
NO
YES
Properly set the signal source.
The periphery of SC8001 is defective.
2

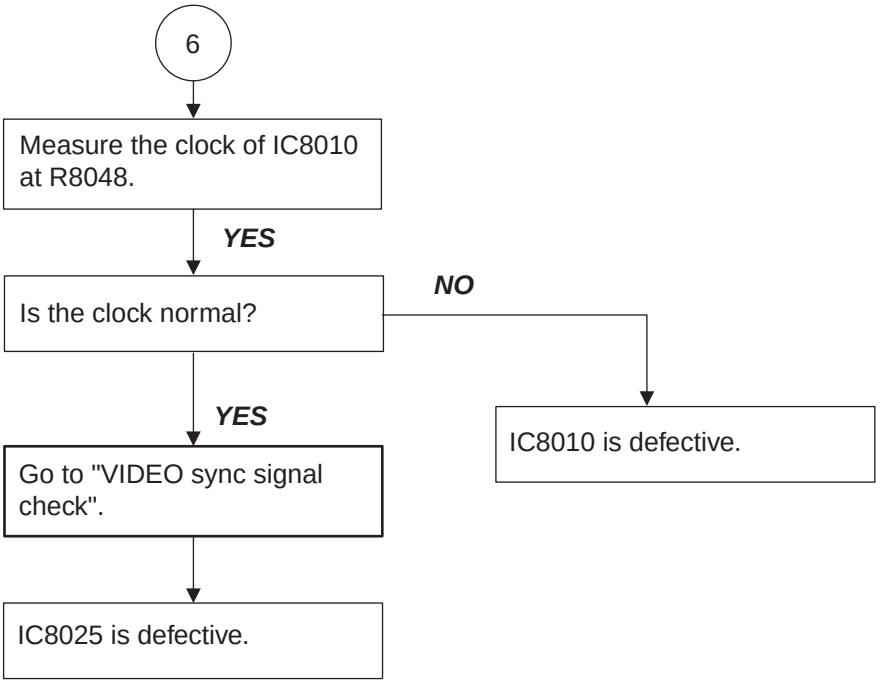

RGB signal check
Is the Signal Type set to RGB?
NO
YES
Set the Signal Type to RGB.
Enter the process mode.
Select R, G and B separately in the pattern menu.
Go to "Checking the periphery of GA5".
Set the signal generator to the gradation signal to check the input signal.
Measure TL8027, 8029 and 8031 with an oscilloscope. (MSBbit after AD conversion)
Are signals properly sent from TL8027, 8029 and 8031?
NO
YES
Are signals supplied to C8164, C8165 and C8166?
NO
YES
The periphery of IC8025 is defective.
The periphery of IC8017 is defective.
Go to "Video input check".

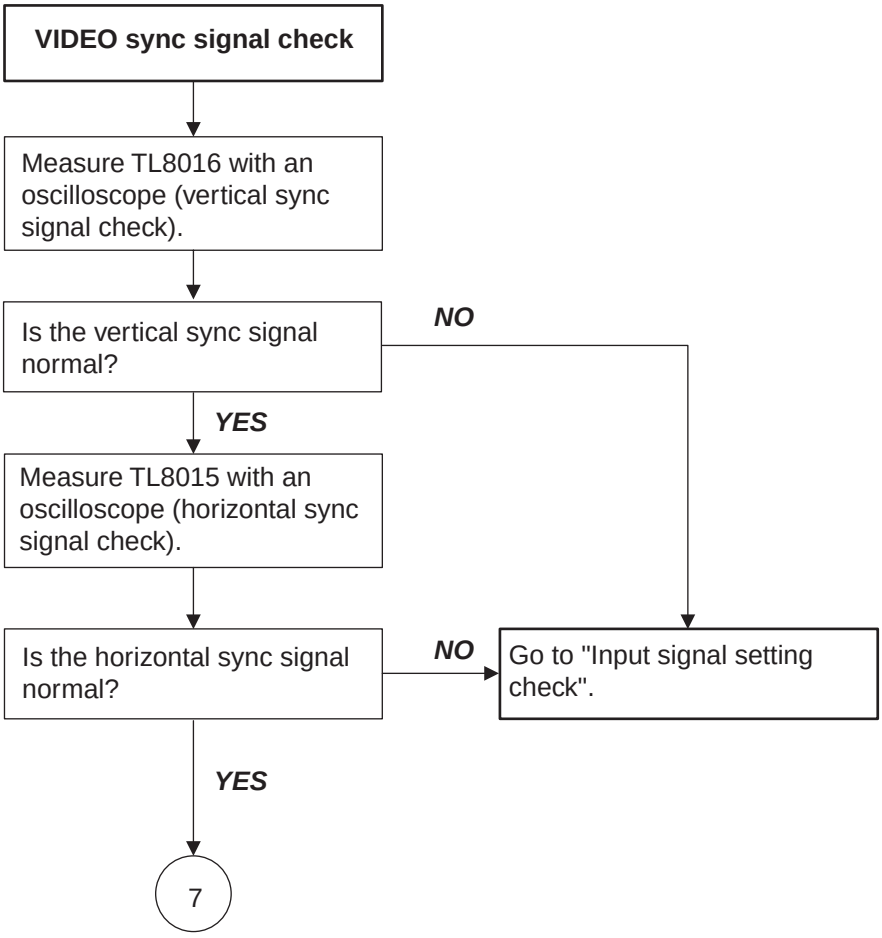

Checking the periphery of GA5
Select R, G and B separately in the pattern menu of the process mode.
Are R, G and B of a picture sent properly?
YES
End of checking the periphery of GA5.
NO
Measure pins 31, 21 and 11of SC8004 with an oscilloscope. These signals are MSB of B/G/R.
Do the contents selected in the pattern menu correspond with the measured signals?
YES
The formatter PWB is defective.
NO
Is the clock applied to the pin 58 of SC8004?
NO
YES
Is the clock (65 MHz) applied to FL8009?
YES
IC8032 is defective.
NO
Is the clock (65 MHz) applied to FL8006?
NO
X8004 is defective.
YES
IC8025 is defective.
Measure TL8047, 8048, and 8049 with an oscilloscope.
Do the contents selected in the pattern menu correspond with the measured signals?
NO
IC8025 is defective.
YES
IC8032 is defective.

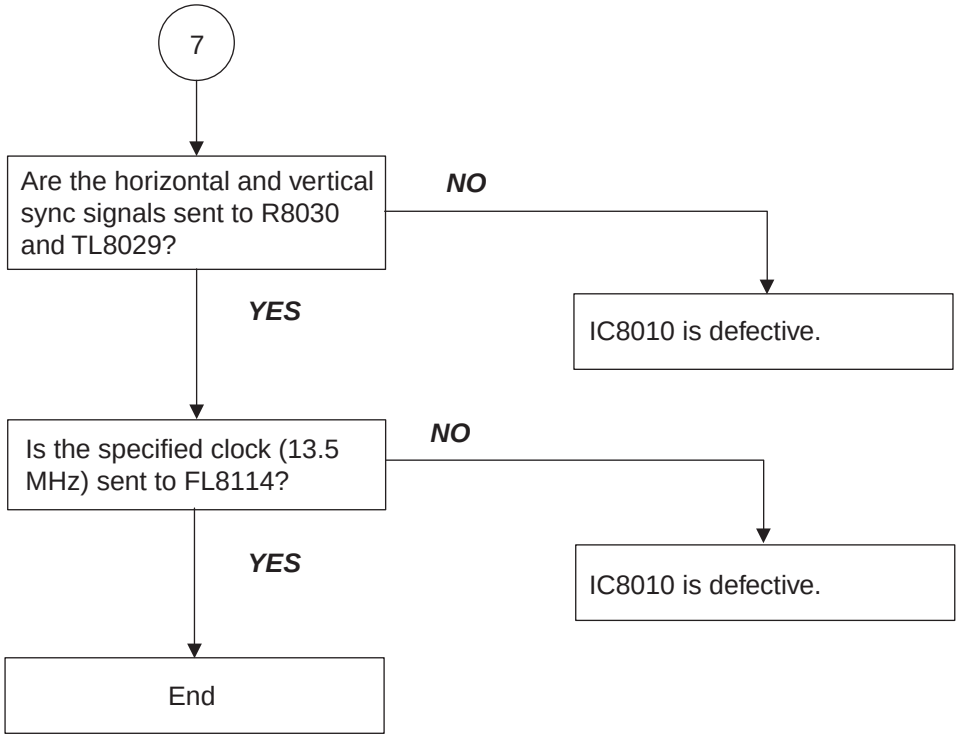

Component input (except 408i) check
Feed the component signal to INPUT1.
Select INPUT1 by using the panel key or remote control.
Is a picture sent?
NO
Go to "SOG circuit check".
YES
4
Are colors normal?
YES
NO
Is the Signal Type set to Component?
NO
Set the Signal Type to Component.
YES
Execute the process adjustment.
4
Is the contour displayed properly?
NO
IC8017 or IC8025 is defective.
YES
Component is normal. End.

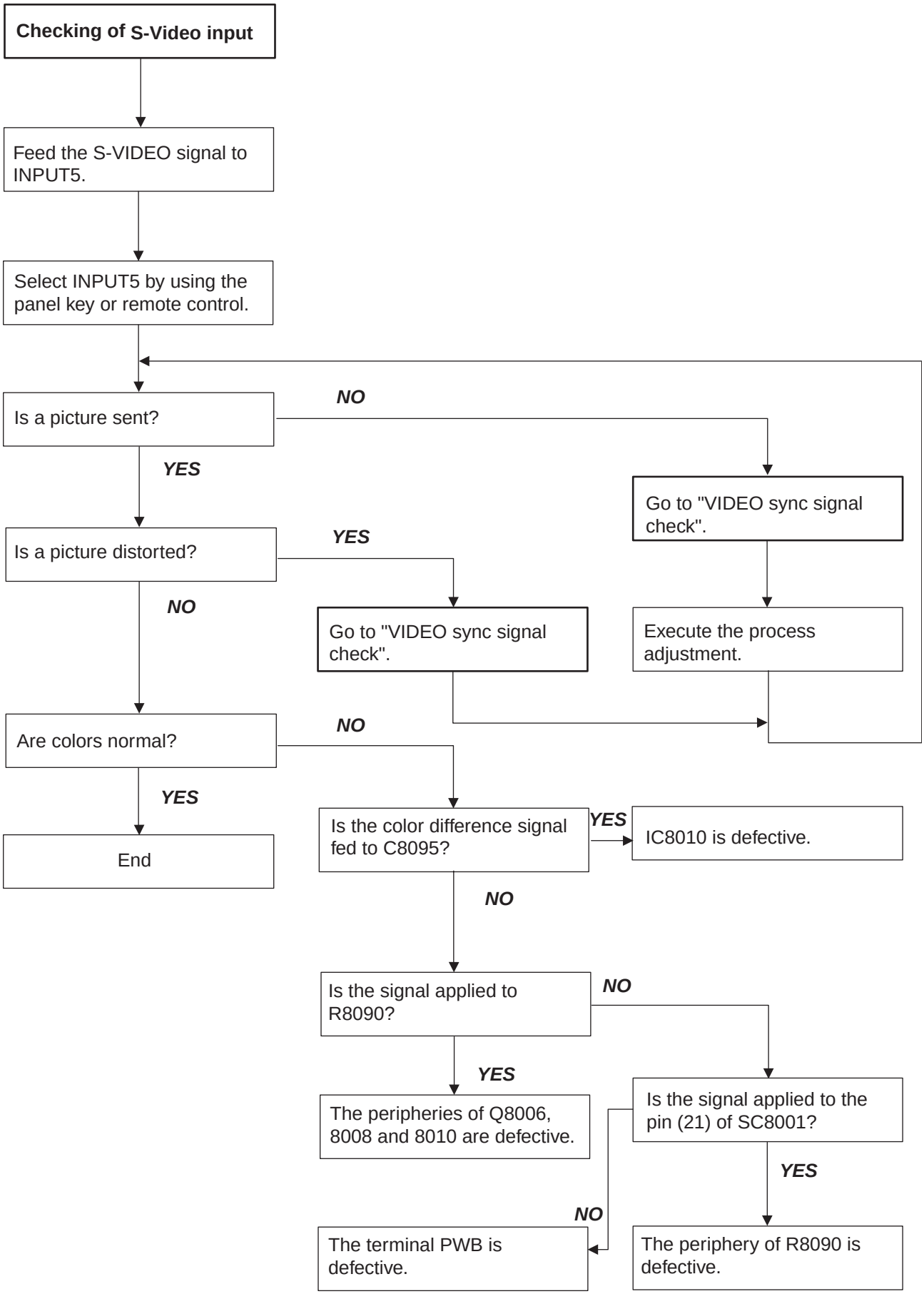

SOG circuit check
Measure TL8017 with an oscilloscope.
Is the composite sync signal reproduced at the right timing?
YES
SOG circuit is normal.
End.
NO
Measure land of C8149 with an oscilloscope.
Is the Y signal including sync signal available?
NO
Go to "Input signal setting check".
YES
The SOG sync separation circuit (periphery of IC8015) is defective.

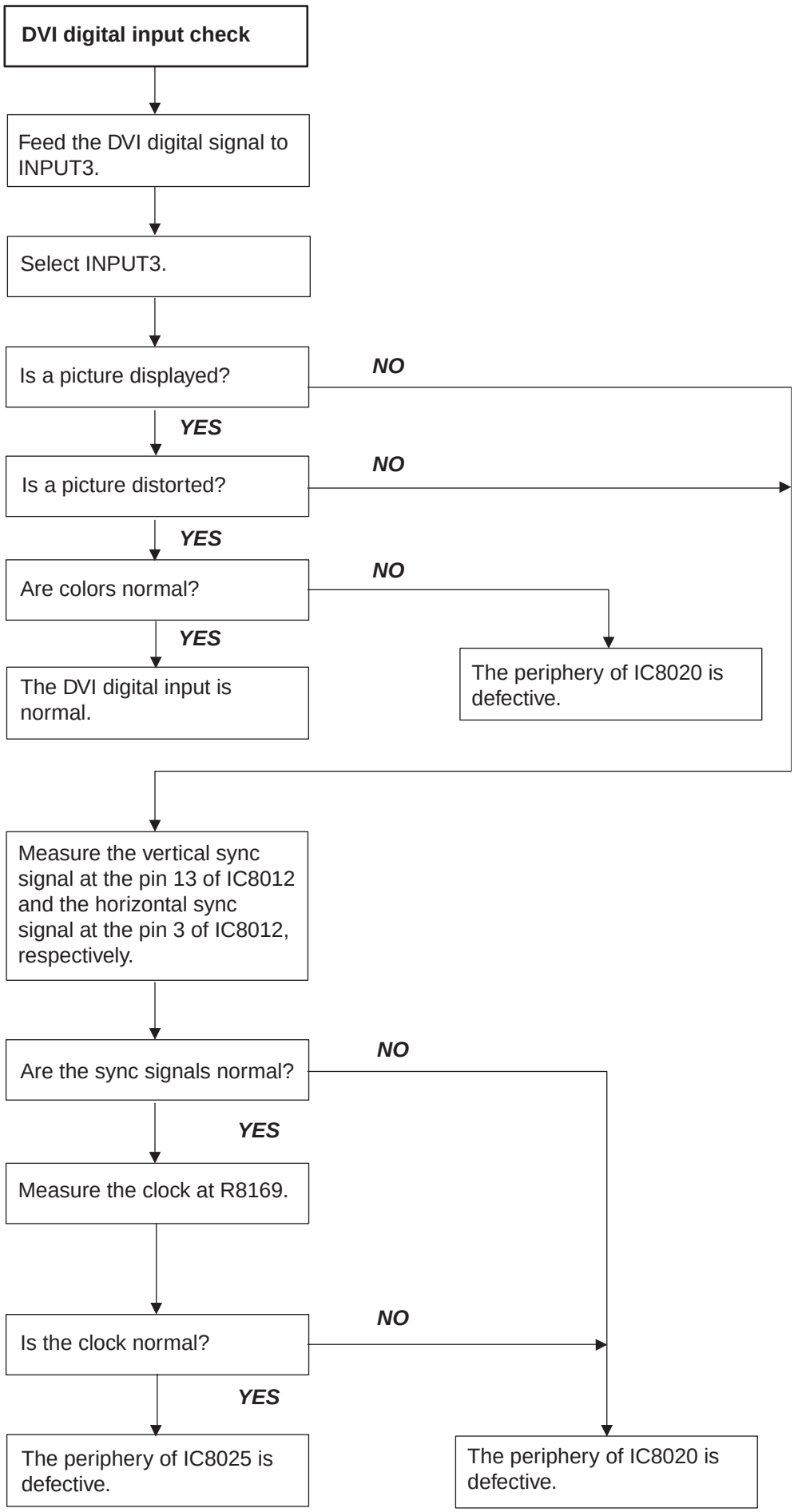

Checking of Video input
Feed the composite VIDEO signal to INPUT4.
Use keys on the main unit or remote control to select INPUT4.
5
Is a picture displayed?
NO
YES
Go to "VIDEO sync signal check".
Is a picture distorted?
YES
NO
Go to "VIDEO sync signal check".
Execute the process adjustment.
Are colors normal?
5
S-VIDEO input check
Is the VIDEO signal fed to C8103?
NO
Is the signal applied to R8092?
NO
YES
YES
6
The peripheries of Q8007,8009 and 8011 are defective.
Is the signal applied to the pin 23 of SC8001?
YES
NO
The terminal PWB is defective.
The periphery of R8092 is defective.


6
Measure the clock of IC8010 at R8048.
YES
Is the clock normal?
NO
IC8010 is defective.
YES
Go to "VIDEO sync signal check".
IC8025 is defective.


VIDEO sync signal check
Measure TL8016 with an oscilloscope (vertical sync signal check).
Is the vertical sync signal normal?
NO
YES
Measure TL8015 with an oscilloscope (horizontal sync signal check).
Is the horizontal sync signal normal?
NO
Go to "Input signal setting check".
YES
7


7
Are the horizontal and vertical sync signals sent to R8030 and TL8029?
NO
IC8010 is defective.
YES
Is the specified clock (13.5 MHz) sent to FL8114?
NO
IC8010 is defective.
YES
End


Checking of S-Video input
Feed the S-VIDEO signal to INPUT5.
Select INPUT5 by using the panel key or remote control.
Is a picture sent?
NO
YES
Go to "VIDEO sync signal check".
Is a picture distorted?
YES
NO
Go to "VIDEO sync signal check".
Execute the process adjustment.
Are colors normal?
NO
YES
End
Is the color difference signal fed to C8095?
YES
IC8010 is defective.
NO
Is the signal applied to R8090?
NO
YES
The peripheries of Q8006, 8008 and 8010 are defective.
Is the signal applied to the pin (21) of SC8001?
YES
NO
The terminal PWB is defective.
The periphery of R8090 is defective.


DVI digital input check
Feed the DVI digital signal to INPUT3.
Select INPUT3.
Is a picture displayed?
NO
YES
Is a picture distorted?
NO
YES
Are colors normal?
NO
YES
The DVI digital input is normal.
The periphery of IC8020 is defective.
Measure the vertical sync signal at the pin 13 of IC8012 and the horizontal sync signal at the pin 3 of IC8012, respectively.
Are the sync signals normal?
NO
YES
Measure the clock at R8169.
Is the clock normal?
NO
YES
The periphery of IC8025 is defective.
The periphery of IC8020 is defective.

SPEZIFIKATIONEN

Produkttyp	Multimedia-Projektor
Modell	XG-PH50X/XG-PH50X-NL
Videosystem	NTSC3.58/NTSC4.43/PAL/PAL-M/PAL-N/PAL-60/SECAM/ DTV480I/DTV480P/DTV540P/DTV576I/DTV576P/DTV720P/DTV1035I/DTV1080I
Anzeigeverfahren	Single Chip Digital Micromirror Device™ (DMD™) von Texas Instruments
DMD-Panel	Panel-Größe: 0,7" Anzahl der Bildpunkte: 786.432 Bildpunkte (1.024 [H] × 768 [V])
Standard-Zoomobjektiv	1,2 × Elektronik-Zoom/Fokuslinse, F: 1,8–2,0, f: 25,6–31,3 mm
Projektionslampe	250 W × 2
Eingangs(INPUT 1)-/Ausgangs	15-pol.-Mini-D-Sub-Anschluss
(OUTPUT)-signal-Komponente	Y: 1,0 Vp-p, negatives Sync., 75 Ω terminiert P_B: 0,7 Vp-p, 75 Ω terminiert P_R: 0,7 Vp-p, 75 Ω terminiert
Horizontale Auflösung	750 Fernsehzeilen (DTV 720P)
Eingangs(INPUT 2)-signal-	BNC-Anschluss
Komponente	Y: 1,0 Vp-p, negatives Sync., 75 Ω terminiert P_B: 0,7 Vp-p, 75 Ω terminiert P_R: 0,7 Vp-p, 75 Ω terminiert
RGB-Eingangs (INPUT 1/2)-/	15-pol.-Mini-D-Sub-Anschluss, 5 BNC-Anschluss: RGB getrennt/Komposit-Sync. (TTL)/Sync. auf Grün-Typ
Ausgangs (OUTPUT)-signal	analoger Eingang: 0-0,7 Vp-p, positiv, 75 Ω terminiert Horizontales Sync.-Signal: TTL-Pegel (positiv/negativ) oder Komposit-Sync. (nur Apple) Ver tikales Sync.-Signal: Wie oben
Digitales RGB-Eingangssignal (INPUT3)	DVI-Anschluss (24-Pin), RGB (digital), 250-1,000 mV, 50 Ω (HDCP-kompatibel)
Video-Eingangssignal (INPUT 4)	RCA-Anschluss: VIDEO, Verbund-Video, 1,0 Vp-p, negatives Sync., 75 Ω terminiert
S-Video-Eingangssignal	4-pol.-Mini-DIN-Anschluss
(INPUT 5)	Y (Luminanzsignal): 1,0 Vp-p, negatives Sync., 75 Ω terminiert C (Chrominanzsignal): Stoß 0,286 Vp-p, 75 Ω terminiert
Audio-Eingangssignal	ø3,5 mm Stereo-Minibuchse, RCA-Buchse 0,5 Vrms, mehr als 22 k Ω
Audio-Ausgangssignal	ø3,5 mm Minibuchse
(AUDIO OUTPUT 1–5)	0,5 Vrms, weniger als 2,2 k Ω
RS-232C-Anschluss	9-pol. D-Sub-Anschluss
LAN-Anschluss	8-pol. RJ-45-Modularanschluss
Pixeltakt	12-230 MHz
Vertikale Frequenz	43-200 Hz
Horizontale Frequenz	15-126 kHz
Audio-Ausgang	3,0 W (Stereo)
Lautsprechersystem	4,5 cm rund × 2
Nennspannung	100-240 V AC
Eingangsstrom	6,3 A
Nennfrequenz	50/60 Hz
Leistungsaufnahme	630 W (wenn „Eco-Modus“ auf „OFF“) bzw. 505 W (wenn „Eco-Modus“ auf „On“) bei 100 V AC 600 W (wenn „Eco-Modus“ auf „OFF“) bzw. 485 W (wenn „Eco-Modus“ auf „On“) bei 240 V AC
Leistungsaufnahme (Bereitschaft)	0,75 W (100 V AC)-1,25 W (240 V AC) (wenn „Monitor Aus.“ und „LAN/RS232C“ auf „Ausschalten“ gestellt sind)
Wärmeableitung	2,370 BTU/Stunde (wenn „Eco-Modus“ auf „OFF“) bzw. 1,900 BTU/Stunde (wenn „Eco- Modus“ auf „ON“) bei 100 V AC 2,260 BTU/Stunde (wenn „Eco-Modus“ auf „OFF“) bzw. 1,825 BTU/Stunde (wenn „Eco- Modus“ auf „ON“) bei 240 V AC
Betriebstemperatur	41°F bis 104°F (+5°C bis +40°C)
Lagertemperatur	–4°F bis 140°F (–20°C bis +60°C)
Gehäuse	Kunststoff
I/R-Trägerfrequenz	38 kHz
Abmessungen (ca.)	16 $^{5}/_{32}$" × 7 $^{3}/_{32}$" × 18 $^{35}/_{64}$" (410 (B) × 180 (H) × 471 (T) mm) (nur Hauptgerät) 16 $^{5}/_{32}$" × 7 $^{37}/_{64}$" × 18 $^{35}/_{64}$" (410 (B) × 192,1 (H) × 471 (T) mm) (einschließlich Einstellfüße und Projektionsteile)
Gewicht (ca.)	XG-PH50X: 32,7lbs. (14,8 kg), XG-PH50X-NL: 30,0lbs.(13,6kg)
Ersatzteile	Lampeneinheit (AN-PH50LP1/AN-PH50LP2), Fernbedienung (9NK5041808700), Netzkabel für USA, Kanada usw. (9NK3090152800), Netzkabel für Europa, außer Großbritannien (9NK3090152700), Netzkabel für Großbritannien, Hongkong und Singapur (9NK3090152900), Netzkabel für Australien, Neuseeland und Ozeanien (9NK3090152600), RGB-Kabel (9NK3080431000), Funkmaus-Empfänger (9NK3790197000), Objektivkappe für Standard-Zoomobjektiv (9NK3797200400), Projektorhandbuch- und Technische Referenz-CD-ROM (9NK3532094500), Bedienungsanleitung (9NK5010011800)

Bedingt durch fortlaufende technische Verbesserungen behält sich SHARP das Recht vor, das Design und die Spezifikationen ohne vorherige Ankündigung ändern zu können. Die angegebenen Leistungswerte stellen die Nennwerte einer in Serienherstellung produzierten Einheit dar. Geringe Abweichungen bei einzelnen Geräten sind möglich.

HINWEISE FÜR DAS WARTUNGSPERSONAL

ACHTUNG: UV-STRAHLUNG

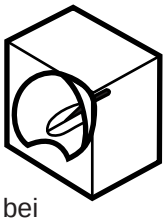
Die Beleuchtungsquelle des LCD-Projektors, eine UHP-Lampe, emittiert eine geringe Menge UV-Strahlung.

DIREKTE BESTRAHLUNG AUF AUGEN UND HAUT MUSS VERMIEDEN WERDEN.

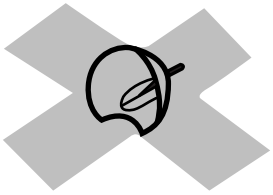
Zur Gewährleistung der Sicherheit muß folgendes beachtet werden:

1. Bei Arbeiten am Projektor bei eingeschalteter Lampe und abgenommenem oberen Gehäuse muß unbedingt eine Sonnenbrille getragen werden.

2. Die Lampe darf nicht außerhalb des Lampengehäuses eingeschaltet werden.



3. Betrieb für länger als 2 Stunden bei abgenommenem Gehäuse ist nicht zulässig.



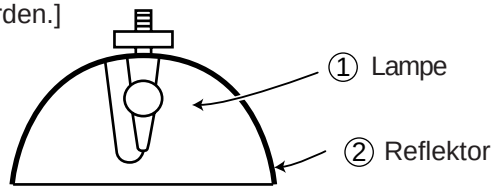
Zur Beachtung bei UV-Strahlung und Mitteldruck-Lampen

1. Vor dem Auswechseln der Lampe muß der Netzstecker gezogen werden.
2. Vor Durchführung von Wartungsarbeiten muß das Gerät eine Stunde abkühlen.
3. Die Lampe darf nur gegen eine der gleichen Art ausgewechselt werden. Typ AN-PH50LP1 und AN-PH50LP2, bemessen für 250W.
4. Die Lampe gibt eine geringe UV-Strahlung ab, daher muß direkter Augenkontakt vermieden werden.
5. Die Mitteldruck-Lampe weist ein Explosionsrisiko auf. Daher müssen die nachstehenden Installationsanweisungen beachtet werden, und die Lampe muß vorsichtig behandelt werden.

■ Auswechseln der Lampe

Hinweis:

Da die Lampe während des Betriebs sehr heiß wird, sollte die Lampe erst ausgewechselt werden, nachdem das Gerät mindestens eine Stunde ausgeschaltet war, damit die Lampe ausreichend abkühlen kann.
Beim Installieren der neuen Lampe muß darauf geachtet werden, die Lampe selbst (Glaskolben) nicht zu berühren. Vielmehr muß die Lampe am Reflektor ② gehalten werden.
[Es darf nur ein Original-Ersatzteil verwendet werden.]



GEFAHR! — Niemals die Spannungsversorgung einschalten, ohne daß eine Lampe vorhanden ist, um elektrische Schläge und Schäden am Gerät zu vermeiden, da der Stabilisator anfangs hohe Spannungen erzeugt.

Da eine geringe Menge UV-Strahlung an der Öffnung zwischen den Lüftern austritt, wird empfohlen, während der Wartungsarbeiten die Abdeckkappe des Zusatzobjektivs an dieser Öffnung anzubringen, um Augen und Haut vor den UV-Strahlen zu schützen.

Vorsichtsmaßregeln für bleifreien Lötzinn

1 Verwendung von bleifreiem Lötzinn

Bei den Platinen für dieses Modells wird bleifreies Lot verwendet. Das Symbol LF kennzeichnet bleifreies Lot und findet sich an den Platinen und in den Wartungshandbüchern. Der Buchstabe hinter LF bezieht sich auf die Art des bleifreien Lots.

Beispiel:

Zeigt bleifreien Lötzinn aus Zinn, Silber und Kupfer an.

2 Bei Reparatur der mit bleifreiem Lötzinn gelöteten Platine immer bleifreien Lötzinn verwenden. Reparatur mit herkömmlichem Lötzinn kann zu Schäden oder Unfällen aufgrund von Rissen führen.

Da der Schmelzpunkt bleifreien Lvtzinns (Sn-Ag-Cu) um 40°C höher als der von Bleidraht-Lötzinn ist, empfehlen wir die Verwendung einer speziellen Lötspitze. Wenn Fragen über den Beschaffung leitfreien Lötzinns oder spezieller Lötspitzen bestehen, wenden Sie sich an unsere Kundendienstvertretung in Ihrem Gebiet.

3 Löten

Da der Schmelzpunkt bleifreien Lötzinns (Sn-Ag-Cu) etwa 220°C beträgt, was um 40°C höher als der von bleihaltigem Lötzinn ist, und außerdem schlechte Löt-Benetzbarkeit aufweist, kann es erforderlich werden, die Lötspitze längere Zeit in Kontakt mit der Platine zu halten. Da die Lötlauge abfliessen kann oder der maximale Hitzewiderstand von Teilen überschritten werden kann, die Lötspitze sofort von der Platine nehmen, sobald eine gute Lötung erzielt ist. Bleifreier Lötzinn enth_lt mehr Zinn, und das Ende der Lötspitze kann leicht angegriffen werden. Immer sicherstellen, dass der Lötkolben nur bei Bedarf eingeschaltet wird.

Wenn ein anderer Typ von Lötzinn an der Lötspitze haften bleibt, verschmilzt er mit dem bleifreien Lötzinn. Die Lötspitze nach jeder Verwendung reinigen.

Wenn die Lötspitze bei der Verwendung geschwärzt wird, die Spitze mit Stahlwolle oder feinem Sandpapier abschmirgeln.

Immer beim Austausch von Teilen vorsichtig sein, und die Polaritätsanzeige auf der Platinenbeschriftung beachten.

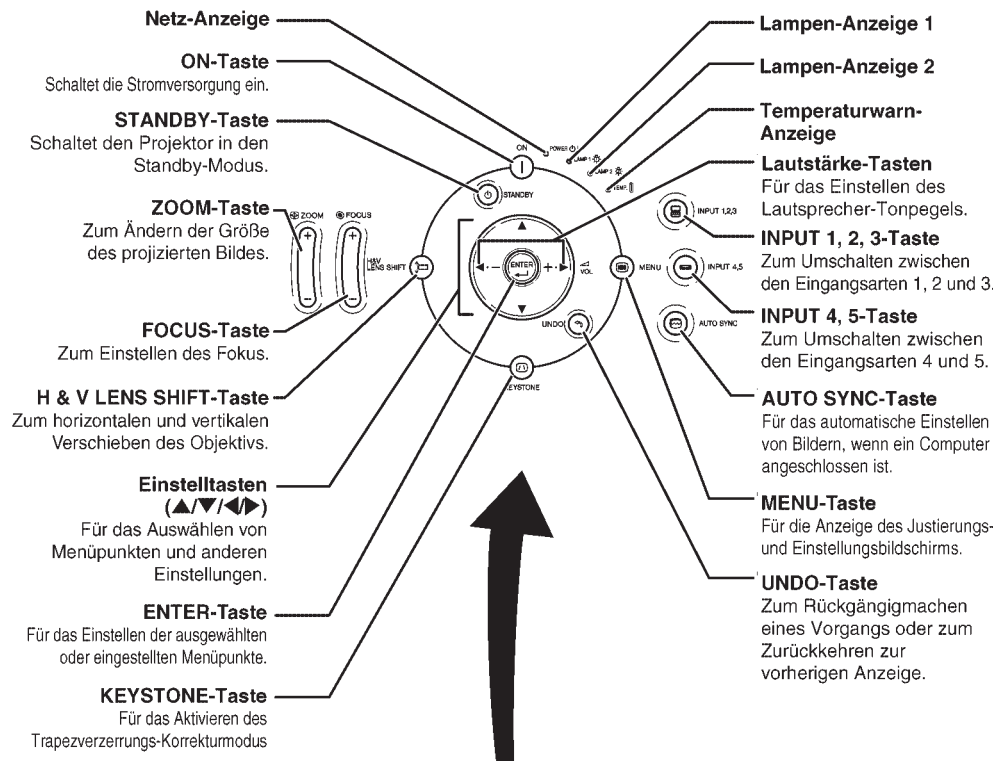
Bleifreier Lötzinn zur Wartung

Teile-Nr.	★	Beschreibung		Code
ZHNDAi123250E	J	ϕ0.3mm	250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm	500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm	1 Rolle	BM

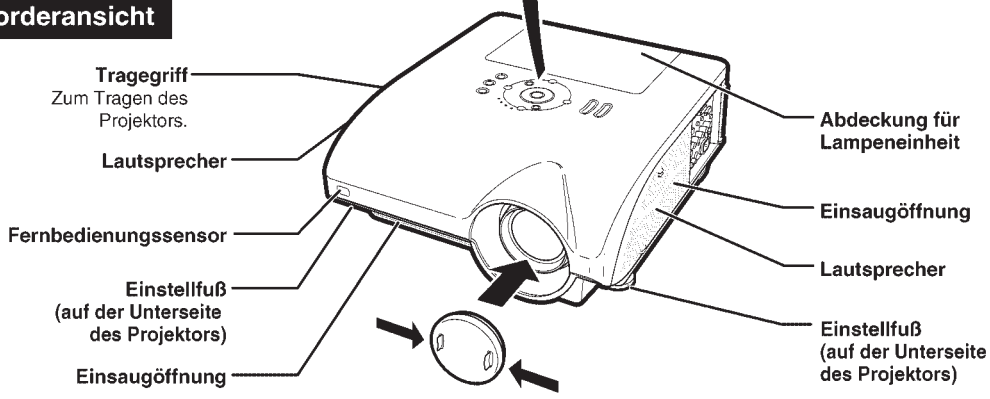
Bedienungsanleitung

Projektor

Draufsicht



Vorderansicht



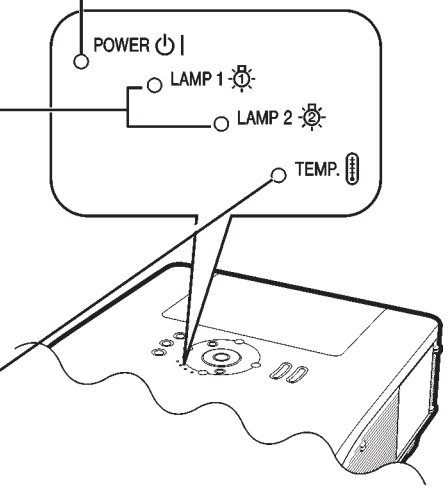
- **Anbringen der Objektivkappe**
  Drücken Sie die Objektivkappe auf, bis diese in Position einrastet.
- **Abnehmen der Objektivkappe**
  Ziehen Sie die Objektivkappe nach außen.

Informationen über die Anzeigen des Projektors

Netz-Anzeige
Rot leuchtend ··· Normal (Standby)
Grün leuchtend ··· Normal (Eingeschaltet)
Rot blinkt ··· Die Lüftungsabdeckung ist geöffnet.

Lampen-Anzeige 1, 2
Grün leuchtend ··· Normal
Grün blinkend ··· Die Lampe wird aufgewärmt.
Rot leuchtend ··· Die Lampe wurde auf unnormale Weise ausgeschaltet oder muss ausgewechselt werden.

Temperaturwarn-Anzeige
Aus ··· Normal
Rot blinkt/leuchtet ··· Die Temperatur im Inneren des Gerätes ist zu hoch.



Projektor (Rückansicht)

Anschlüsse

INPUT 1-Anschluss
Anschluss für Computer-RGB- und Komponentensignale.

AUDIO-Eingangsanschluss (1)
Audio-Eingangsanschluss (1) für INPUT 1.

INPUT 2-Eingangsbuchsen
BNC-Buchsen für Computer-RGB- und Komponenten-Signale.

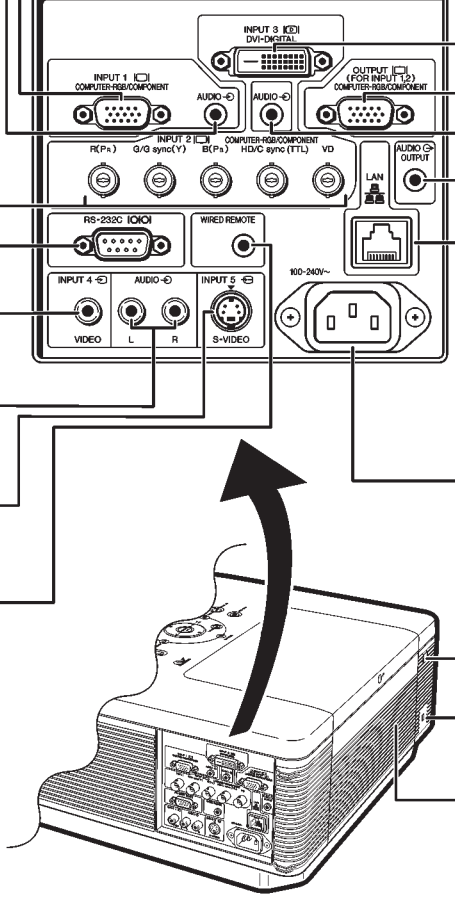
RS-232C-Anschluss
Anschluss für die Bedienung des Projektors unter Verwendung eines Computers.

INPUT 4-Anschluss
Buchse für den Anschluss von Videogeräten.

AUDIO-Eingangsbuchse (4, 5)
Gemeinsamer Audioeingangsanschluss für INPUT 4 und 5.

INPUT 5-Anschluss
Anschluss für ein Videogerät mit einem S-VIDEO Anschluss.

WIRED REMOTE-Anschluss
Zum Anschluss der Fernbedienung an den Projektor, wenn die Signale der Fernbedienung nicht ausreichen, um den Fernbedienungs-Sensor zu erreichen.



INPUT 3-Anschluss
Buchsen für digitale DVI RGB- und digitale Komponenten-Signale.

OUTPUT (FOR INPUT 1, 2)-Anschluss
Ausgangsbuchse für Computer-RGB- und Komponenten-Signale. Gemeinsame Eingangsbuchse für INPUT 1 und 2.

AUDIO-Eingangsbuchse (2, 3)
Gemeinsamer Audioeingangsanschluss für INPUT 2 und 3.

AUDIO OUTPUT-Anschluss
Geteiltes Audio Ausgabeanschluss für INPUT 1-5.

LAN-Anschluss
Anschluss für die Steuerung des Projektors mit Hilfe eines Computers über ein Netzwerk.

Netzanschluss
Schließen Sie das mitgelieferte Netzkabel an.

Fernbedienungssensor

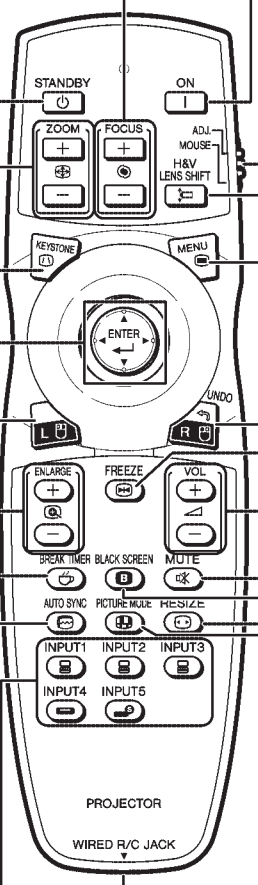
Kensington-Sicherheits-standardanschluss

Luftaustrittöffnung
Die Geschwindigkeit und das Geräusch des Kühlventilators kann sich abhängig von internen Temperaturschwankungen während des Betriebes verändern. Dies ist ein normaler Vorgang und kein Zeichen für eine Fehlfunktion.

Verwendung der Kensington-Sperre

- Dieser Projektor ist mit einem Kensington-Sicherheitsstandardanschluss für die Verwendung des Kensington MicroSaver-Sicherheitssystems ausgestattet. Lesen Sie hinsichtlich dessen Verwendung die Informationen, die dem System beiliegen, um den Projektor zu sichern.

Fernbedienung



FOCUS-Tasten
Für die Scharfeinstellung des projizierten Bildes.

STANDBY-Taste
Schaltet den Projektor in den Standby-Modus.

ZOOM-Tasten
Für das Einstellen der projizierten Bildgröße.

KEYSTONE-Taste
Für das Aktivieren des Trapezverzerrungs-Korrekturmodus.

Maus-/Einstellungstaste (▲/▼/◀/▶)
- Um den Computer-Cursor bewegen zu können, wenn der Schalter ADJ./MOUSE auf Position MOUSE gestellt ist.
- Um Menüpunkte auswählen zu können, wenn der Schalter ADJ./MOUSE auf Position ADJ. gestellt ist.

ENTER-Taste
Für die Einstellung der gewählten oder eingestellten Menüpunkte.

L-click-Taste
Zum Ausführen eines Linksklicks, wenn der Schalter ADJ./MOUSE auf Position MOUSE gestellt ist.

ENLARGE-Tasten (Vergrößern/Verkleinern)
Für das Vergrößern/Verkleinern eines Bildteils.

BREAK TIMER-Taste
Zum Einstellen der Pausendauer.

AUTO SYNC-Taste
Für das automatische Einstellen von Bildern, wenn ein Computer angeschlossen ist.

Tasten für INPUT 1, 2, 3, 4 und 5
Für das Umschalten auf die entsprechende Eingangs-Betriebsart.

ON-Taste
Schaltet die Stromversorgung ein.

ADJ./MOUSE-Schalter
Zum Umschalten zwischen den Fernbedienungsarten.

H & V LENS SHIFT-Taste
Zur horizontalen und vertikalen Verschieben des Objektivs.

MENU-Taste
Für die Anzeige des Justierungs- und Einstellungsbildschirms.

R-click/UNDO-Taste
- Zum Ausführen eines Rechtsklicks, wenn der Schalter ADJ./MOUSE auf Position MOUSE gestellt ist.
- Um einen Vorgang rückgängig zu machen oder zur vorhergehenden Anzeige zurückzukehren, wenn der Schalter ADJ./MOUSE auf Position ADJ. gestellt ist.

FREEZE-Taste
Für das Einfrieren von Bildern.

Lautstärke-Tasten
Für das Einstellen des Lautsprecher-Tonpegels.

MUTE-Taste
Zum zeitweisen Stummschalten.

BLACK SCREEN-Taste
Zum vorübergehenden Einblenden des Schwarzbildes.

RESIZE-Taste
Für das Umschalten der Bildwandgröße.

PICTURE MODE-Taste
Zum Umschalten des Bildmodus.

WIRED R/C JACK
Zum Anschluss der Fernbedienung an den Projektor, wenn die Signale der Fernbedienung nicht ausreichen, um den Fernbedienungs-Sensor zu erreichen.

Hinweis

- Alle Tasten auf der Fernbedienung, mit Ausnahme der Maus-/Einstelltaste und des ADJ./MOUSE-Schalters bestehen aus einem leuchtenden Material, das im Dunkeln gut sichtbar ist. Der Leuchteffekt lässt mit der Zeit nach. Die selbstleuchtenden Tasten werden wieder aufgeladen, w-enn Sie Licht ausgesetzt werden.

Reichweite

Der Projektor kann mittels der Fernbedienung innerhalb der in der Abbildung dargestellten Bereiche gesteuert werden.

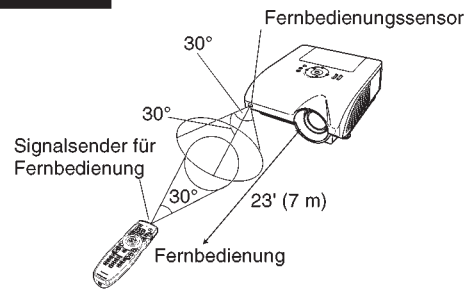
Hinweis

- Das Signal von der Fernbedienung kann für eine einfache Bedienung von der Bildwand reflektiert werden. Die tatsächliche Reichweite des Signals kann je nach Bildwandmaterial unterschiedlich sein.

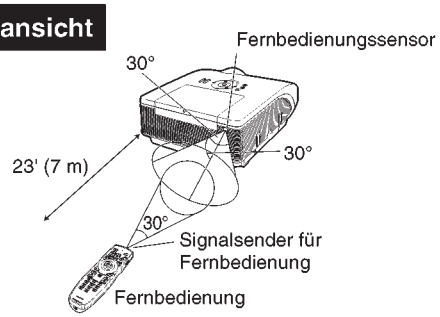
Bei Verwendung der Fernbedienung:

- Nicht fallen lassen, keiner Feuchtigkeit oder hohen Temperatur aussetzen.
- Die Fernbedienung funktioniert unter Umständen nicht unter einer Fluoreszenzlampe. Unter diesen Umständen den Projektor von der Fluoreszenzlampe entfernt aufstellen.

Vorderansicht

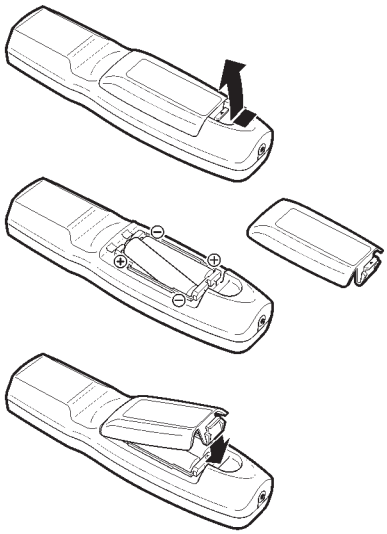


Rückansicht



Einsetzen der Batterien

Die Batterien (zwei R6-Batterien („AA“, UM/SUM-3, HP-7 oder ähnlich)) sind in der Packung enthalten.



1 Ziehen Sie die Lasche an der Abdeckung herunter und entfernen Sie die Abdeckung in Pfeilrichtung.

2 Die beiliegenden Batterien einlegen.

- Die Batterien einlegen und sicherstellen, dass die Pole mit der Markierung ⊕ und ⊖ im Batteriefach übereinstimmen.

3 Führen Sie die Zapfen am unteren Ende der Batteriefach-Abdeckung in die hierfür vorgesehenen Öffnungen ein und drücken Sie die Abdeckung fest.

Falsche Verwendung der Batterien kann ein Auslaufen oder Explosion zur Folge haben. Bitte befolgen Sie die unten stehenden Vorsichtsmaßnahmen.

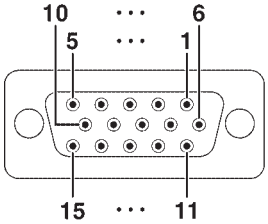
⚠ Achtung

- Die Batterien einlegen und sicherstellen, dass die Pole mit den Markierungen ⊕ und ⊖ im Batteriefach übereinstimmen.
- Batterien unterschiedlichen Typs haben unterschiedliche Eigenschaften, verwenden Sie deshalb keine Batterien unterschiedlichen Typs zusammen.
- Verwenden Sie keine neuen und alten Batterien zusammen.
  Dadurch könnte die Lebensdauer der neuen Batterien reduziert oder ein Auslaufen der Batterien verursacht werden.
- Nehmen Sie leere Batterien aus der Fernbedienung heraus, da sie ansonsten auslaufen könnten.
  Aus den Batterien ausgelaufene Batterieflüssigkeit ist für Ihre Haut schädlich, wischen Sie die Batterien deshalb unbedingt zuerst ab und nehmen Sie sie dann mit einem Tuch heraus.

- Die diesem Projektor beiliegenden Batterien können unter Umständen, je nach Handhabung, nach kurzer Zeit aufgebraucht sein. Stellen Sie sicher, dass sie so bald wie möglich durch neue Batterien ersetzt werden.
- Nehmen Sie die Batterien heraus, wenn die Fernbedienung lange nicht verwendet wird.

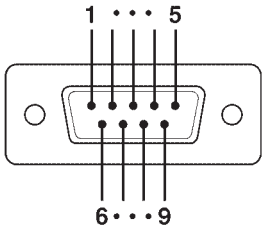
Pin-Belegung

RGB- Signal-Anschluss (INPUT 1 und OUTPUT (INPUT 1, 2)): 15-pol. Mini-D-Sub-Anschluss



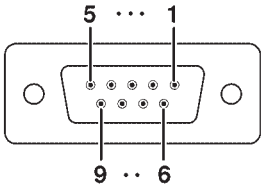
RGB-Eingang	Komponenteneingang
1. Videoeingang (rot)	1. PR (CR)
2. Videoausgang (grün/Sync. auf grün)	2. Y
3. Videoausgabe (blau)	3. PB (CB)
4. Nicht angeschlossen	4. Nicht angeschlossen
5. Nicht angeschlossen	5. Nicht angeschlossen
6. Erde (rot)	6. Erde (PR)
7. Erde (grün/Sync. auf grün)	7. Erde (Y)
8. Erde (blau)	8. Erde (PB)
9. Nicht angeschlossen	9. Nicht angeschlossen
10. GND	10. Nicht angeschlossen
11. Nicht angeschlossen	11. Nicht angeschlossen
12. Bi-direktionale Daten	12. Nicht angeschlossen
13. Horizontal-Sync-Signal: TTL-Pegel	13. Nicht angeschlossen
14. Vertikal-Sync-Signal: TTL-Pegel	14. Nicht angeschlossen
15. Datentakt	15. Nicht angeschlossen

RS-232-Anschluss: 9-pol. Mini-DIN-Anschluss



Pin-Nr.	Signal	Name	E/A	Referenz
1				Nicht angeschlossen
2	RD	Daten empfangen	Eingang	Interner Stromkreisanschluss
3	SD	Daten senden	Ausgang	Interner Stromkreisanschluss
4				Nicht angeschlossen
5	SG	Signalerde		Interner Stromkreisanschluss
6				Nicht angeschlossen
7	RS	Anforderung zur Ausgabe		Angeschlossen mit CS in interner Verbindung
8	CS	Frei zur Ausgabe		Angeschlossen mit RS in interner Verbindung
9				Nicht angeschlossen

RS-232C Kabel empfohlene Verbindung: 9-pol. D-Sub-Anschluss



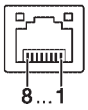
Pin-Nr.	Signal	Pin-Nr.	Signal
1	CD	1	CD
2	RD	2	RD
3	SD	3	SD
4	ER	4	ER
5	SG	5	SG
6	DR	6	DR
7	RS	7	RS
8	CS	8	CS
9	CI	9	CI

Hinweis

- Je nach verwendetem Steuergerät ist es unter Umständen erforderlich, Pin 4 und Pin 6 am Steuergerät (z.B. am Computer) anzuschließen.

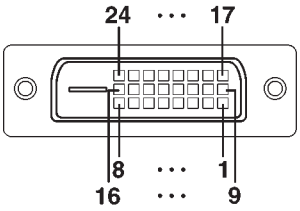
Projektor Pin-Nr.	Computer Pin-Nr.
4	4
5	5
6	6

LAN-Anschluss : 8-pol. RJ-45 Modularanschluss



Pin-Nr.	Signal	Pin-Nr.	Signal
1	TX+	5	
2	TX–	6	RX–
3	RX+	7	
4		8	

DVI-Digital Anschluss (INPUT 3)

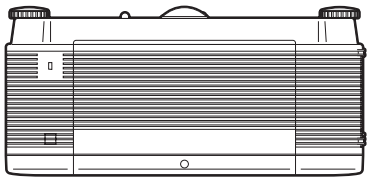


Pin-Nr.	Signal	Pin-Nr.	Signal
1	T.M.D.S.-Daten 2–	17	T.M.D.S.-Daten 0–
2	T.M.D.S.-Daten 2+	18	T.M.D.S.-Daten 0+
3	T.M.D.S.-Daten 2-Schutz	19	T.M.D.S.-Daten 0-Schutz
4	Nicht angeschlossen	20	Nicht angeschlossen
5	Nicht angeschlossen	21	Nicht angeschlossen
6	DDC-Takt	22	T.M.D.S.-Taktschutz
7	DDC-Daten	23	T.M.D.S.-Takt+
8	Nicht angeschlossen	24	T.M.D.S.-Takt–
9	T.M.D.S.-Daten 1–		
10	T.M.D.S.-Daten 1+		
11	T.M.D.S.-Daten 1-Schutz		
12	Nicht angeschlossen		
13	Nicht angeschlossen		
14	Stromversorgung +5 V		
15	Erde		
16	Zündkerzenerkennung		

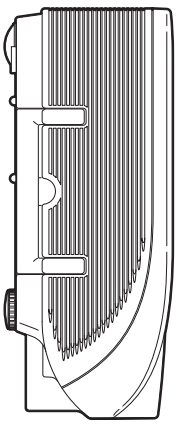
ABMESSUNGEN

Einheiten: Zoll (mm)

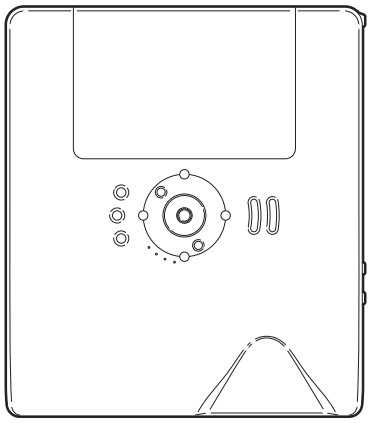
Ansicht von hinten



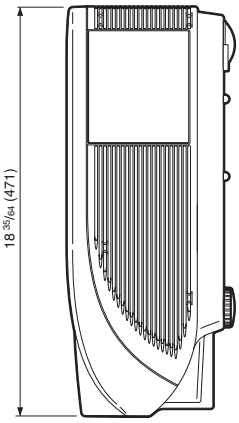
Ansicht von der Seite



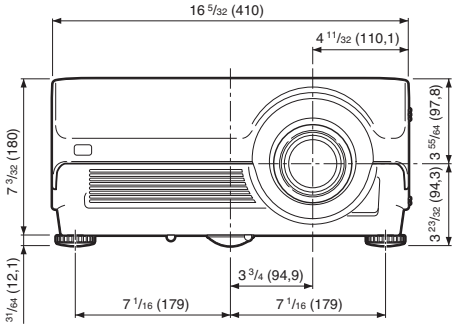
Ansicht von oben



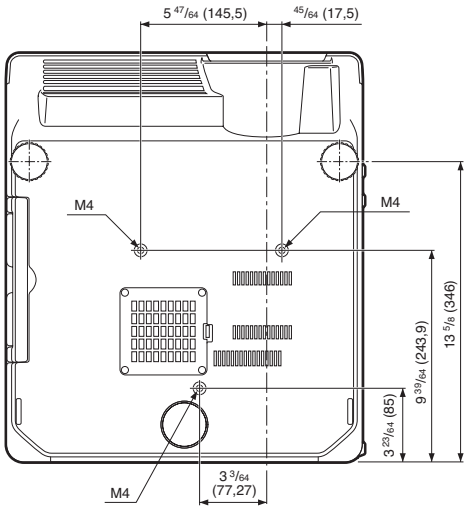
Ansicht von der Seite



Ansicht von vorne



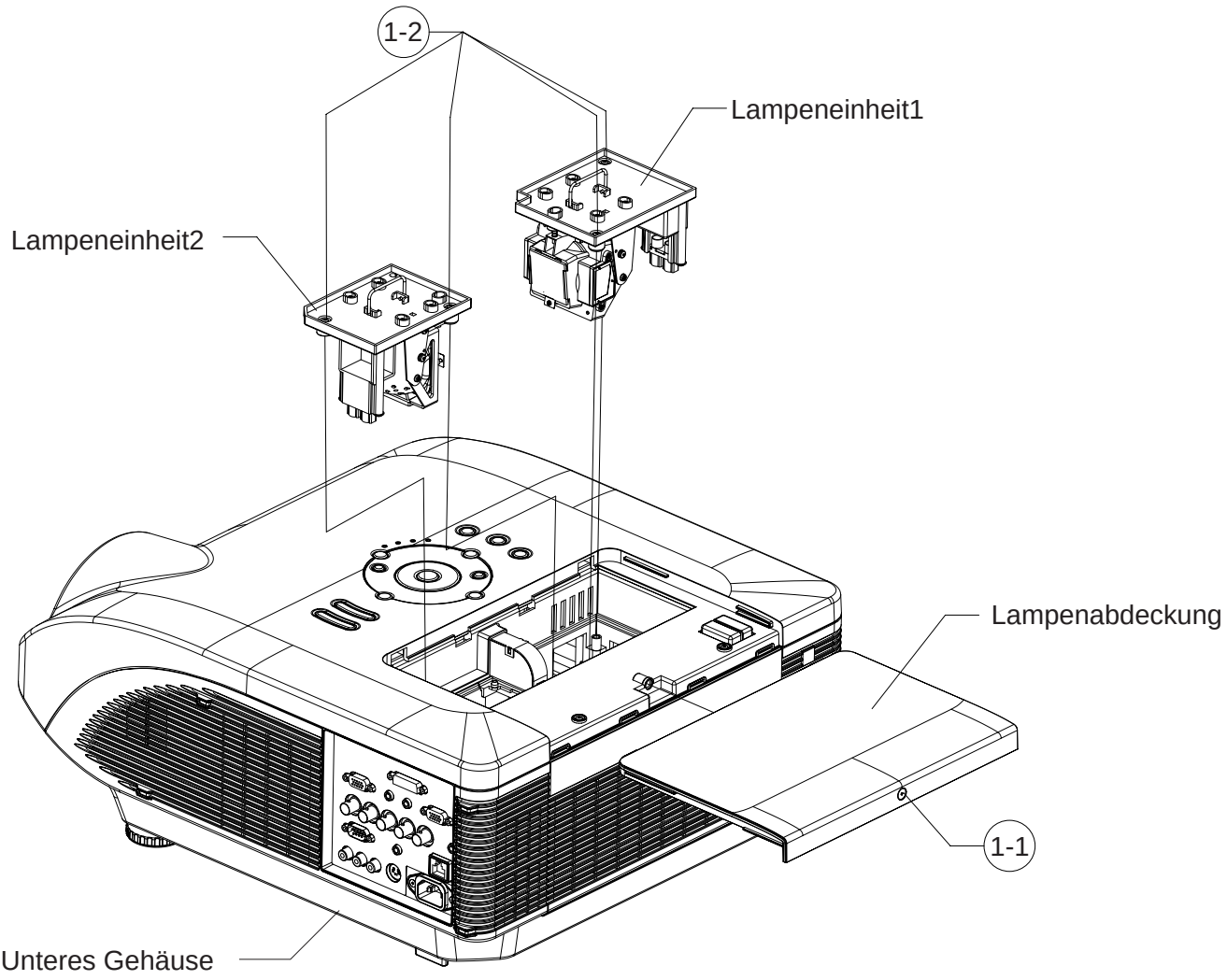
Ansicht von unten



ENTFERNEN DER HAUPTTEILE

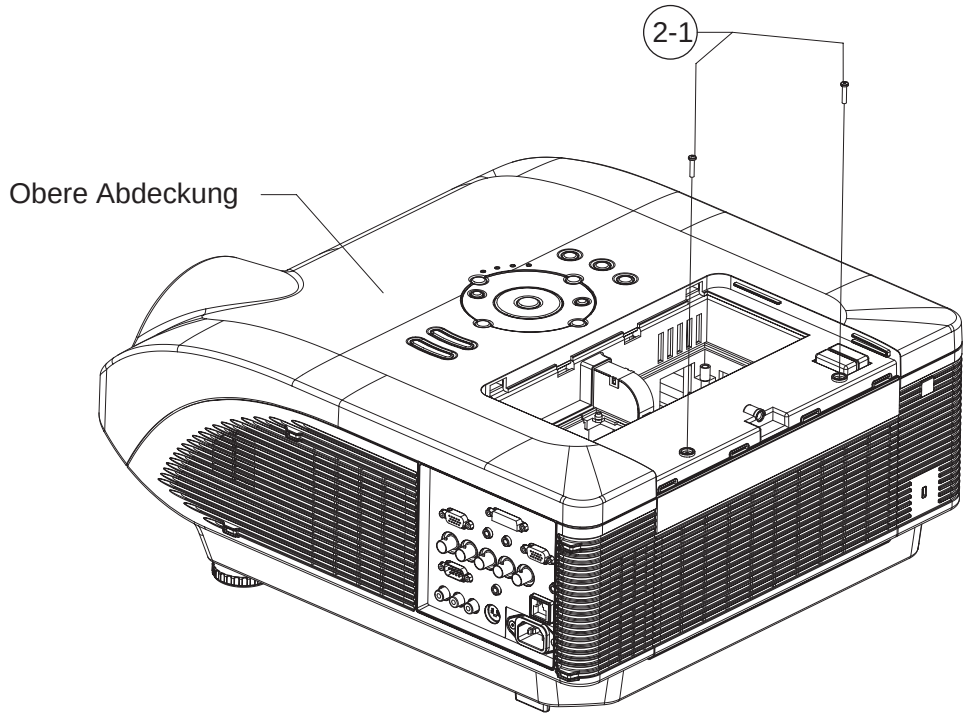
1. Entfernung der Lampeneinheit

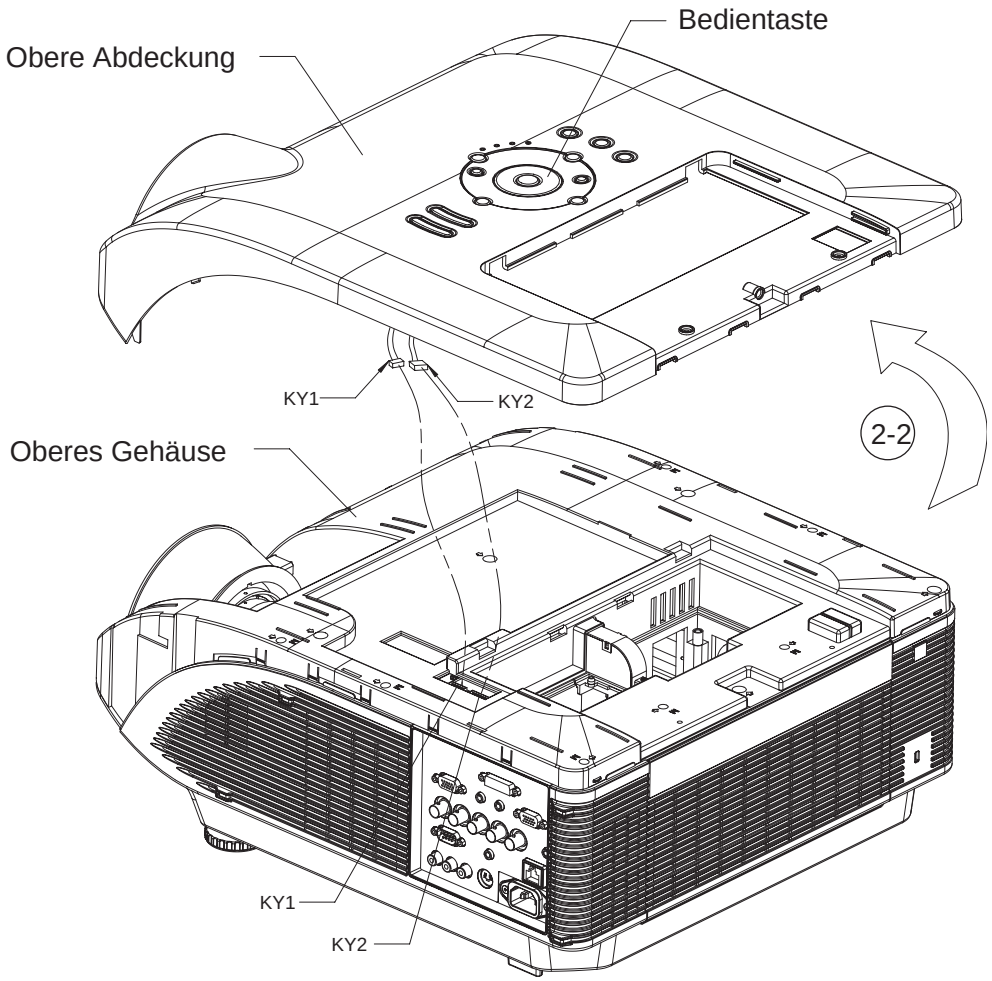
1-1. Die Schraube an der Lampenabdeckung losdrehen, um die Lampenabdeckung abzunehmen.
1-2. Die vier Schrauben an den Lampeneinheiten losdrehen, um sie zu entfernen.



2. Entfernung der oberen Abdeckung

2-1. Die beiden Schrauben an der oberen Abdeckung losdrehen.
2-2. Die Hinterseite der oberen Abdeckung langsam anheben, und die Bedientastenanschlüsse (KY1 und KY2) abtrennen. Die obere Abdeckung heraufziehen.

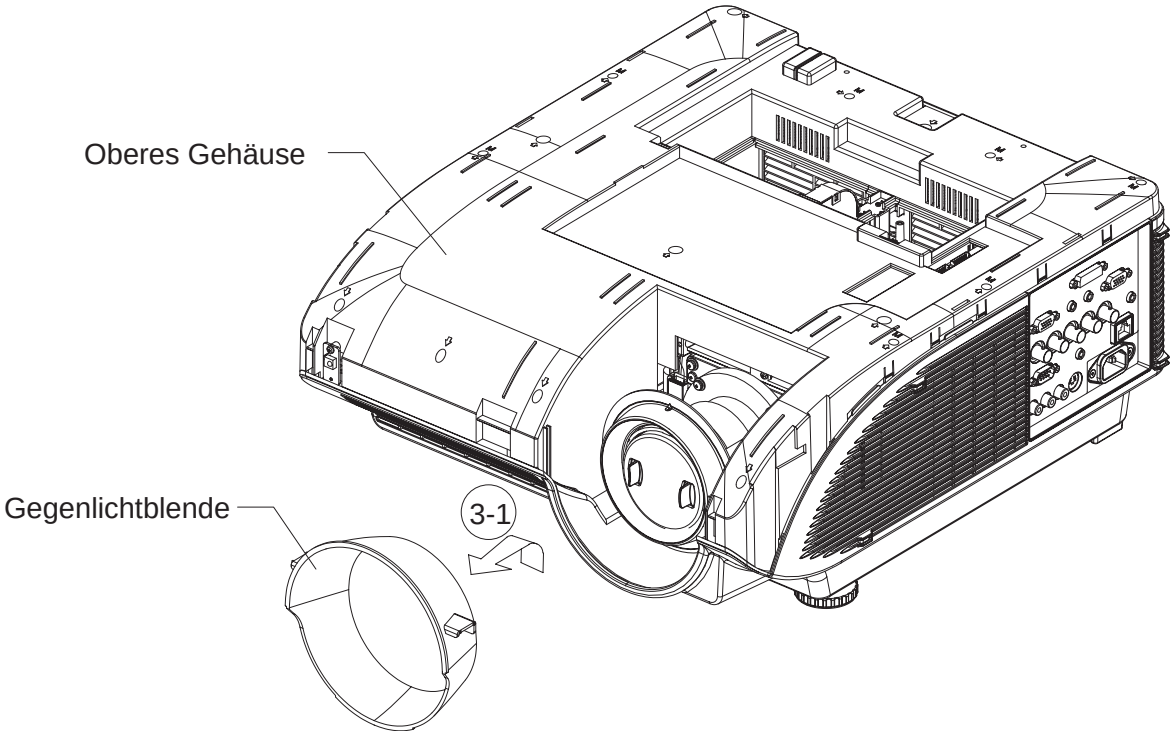




Für XG-PH50X-NL sind die Objektiv-Ausbauarbeiten (Abschnitte 3 - 6) nicht erforderlich.

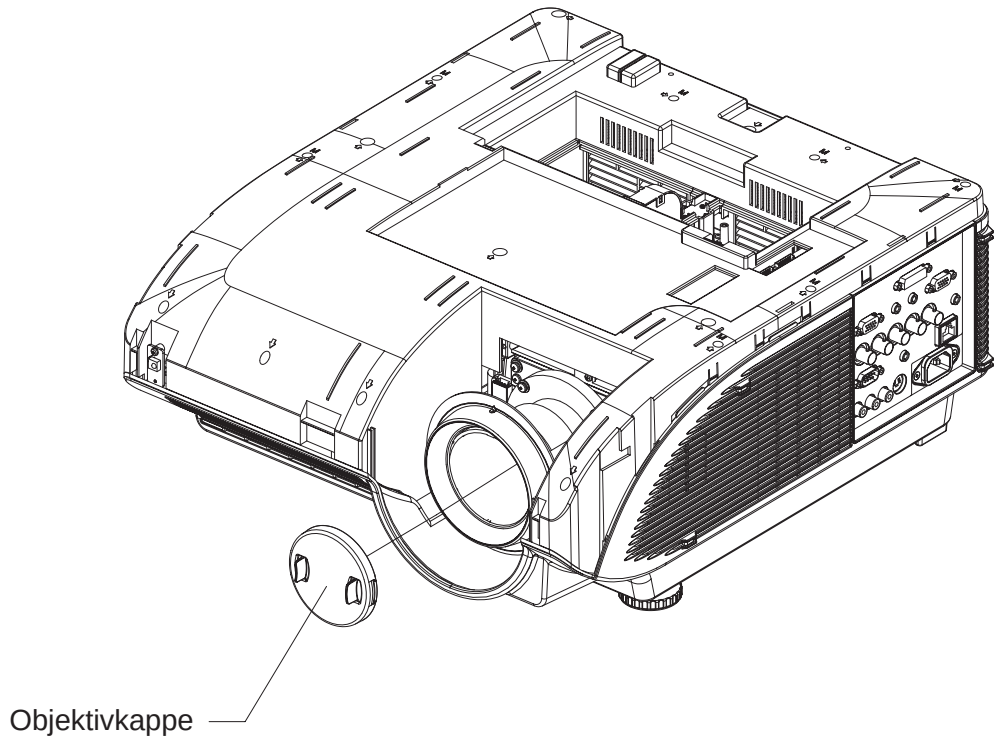
3. Entfernung der Gegenlichtblende

3-1. Die Gegenlichtblende langsam anheben, bis sie nach vorne bewegt werden kann; danach die Gegenlichtblende nach vorne bewegen, um sie zu entfernen.



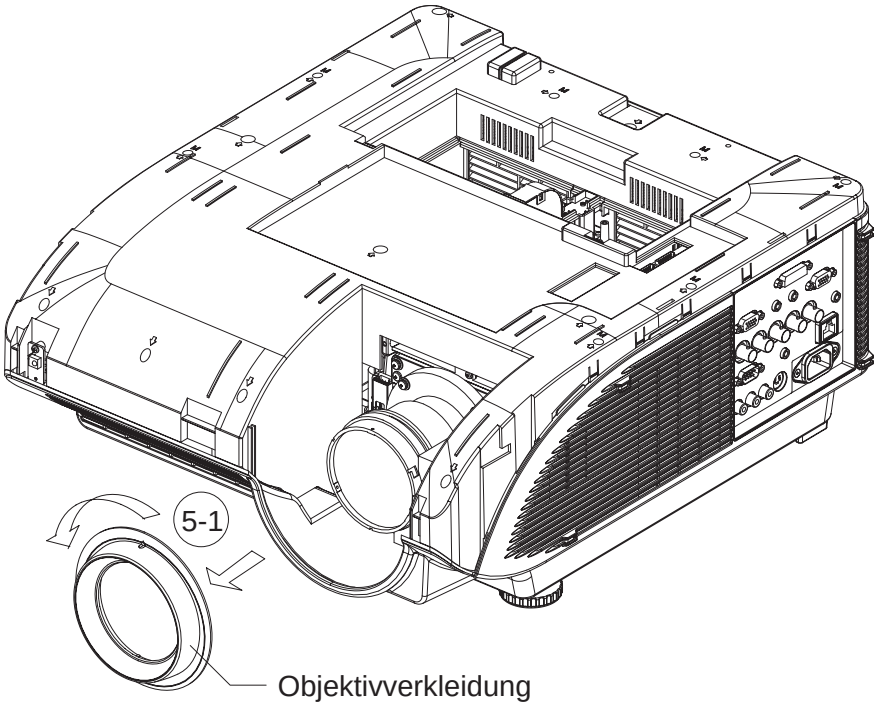
4. Entfernung der Objektivkappe

4-1. Die Objektivkappe abnehmen.



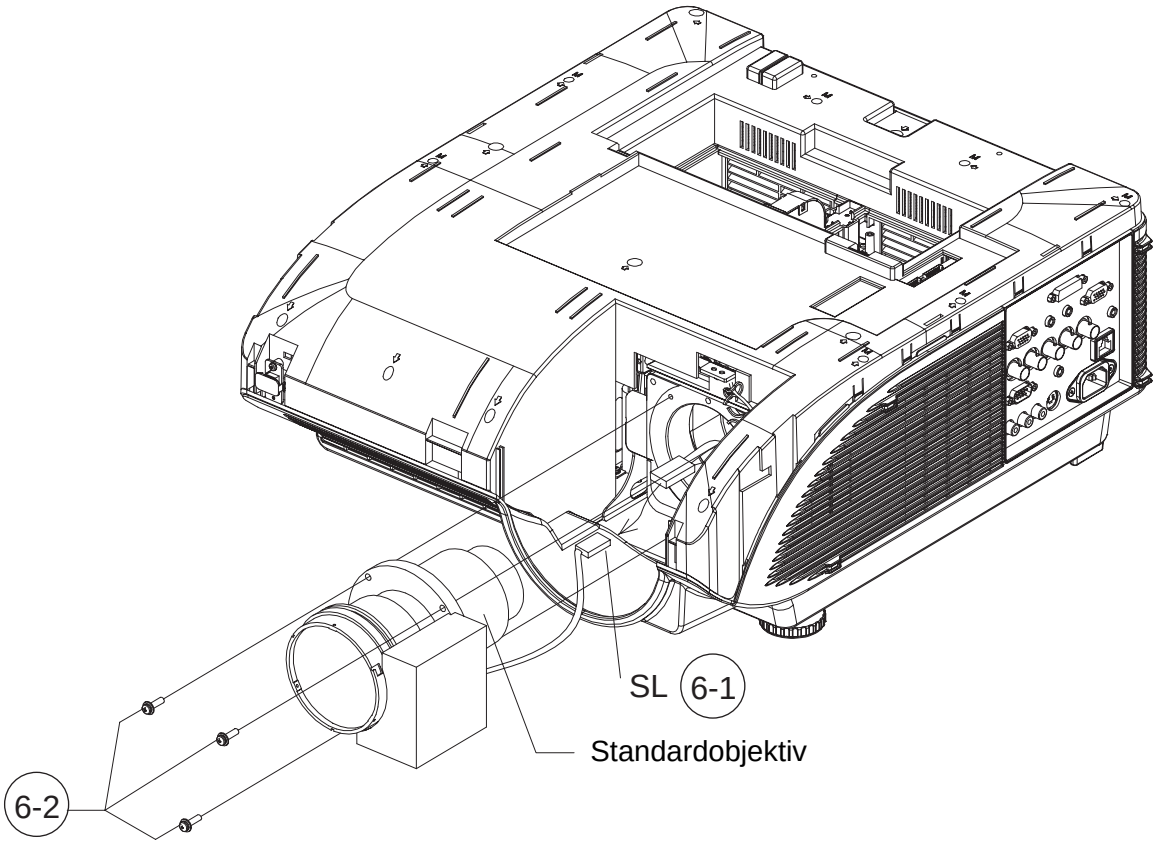
5. Entfernung der Objektivverkleidung

5-1. Die Objektivverkleidung entgegen dem Uhrzeigersinn drehen, um sie abzunehmen.



6. Entfernung des Standardobjektivs

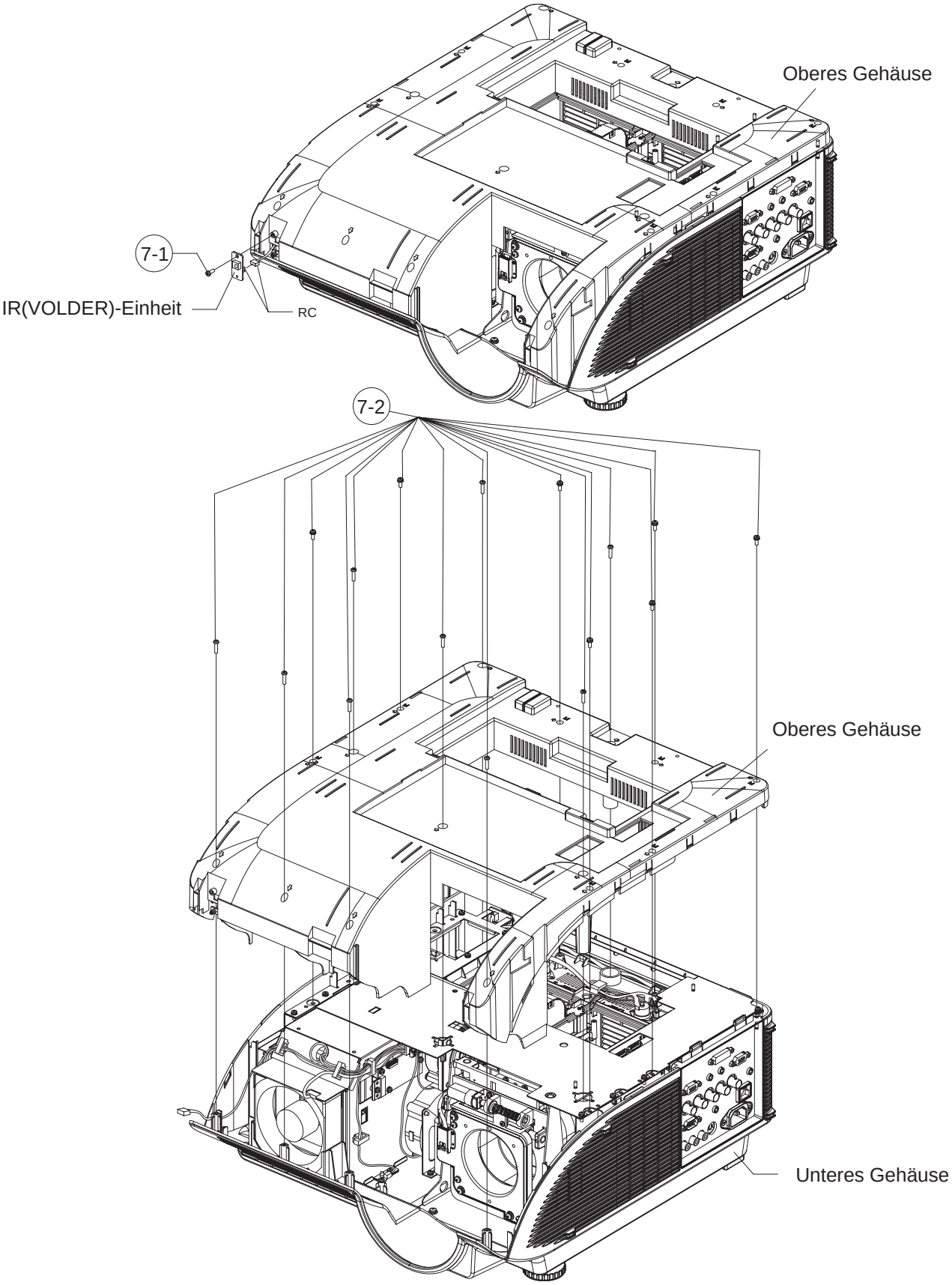
6-1. Den Standardobjektivanschluss (SL) abtrennen.
6-2. Die drei Schrauben am Standardobjektiv losdrehen, um es abzunehmen.



7. Entfernung des oberen Gehäuses

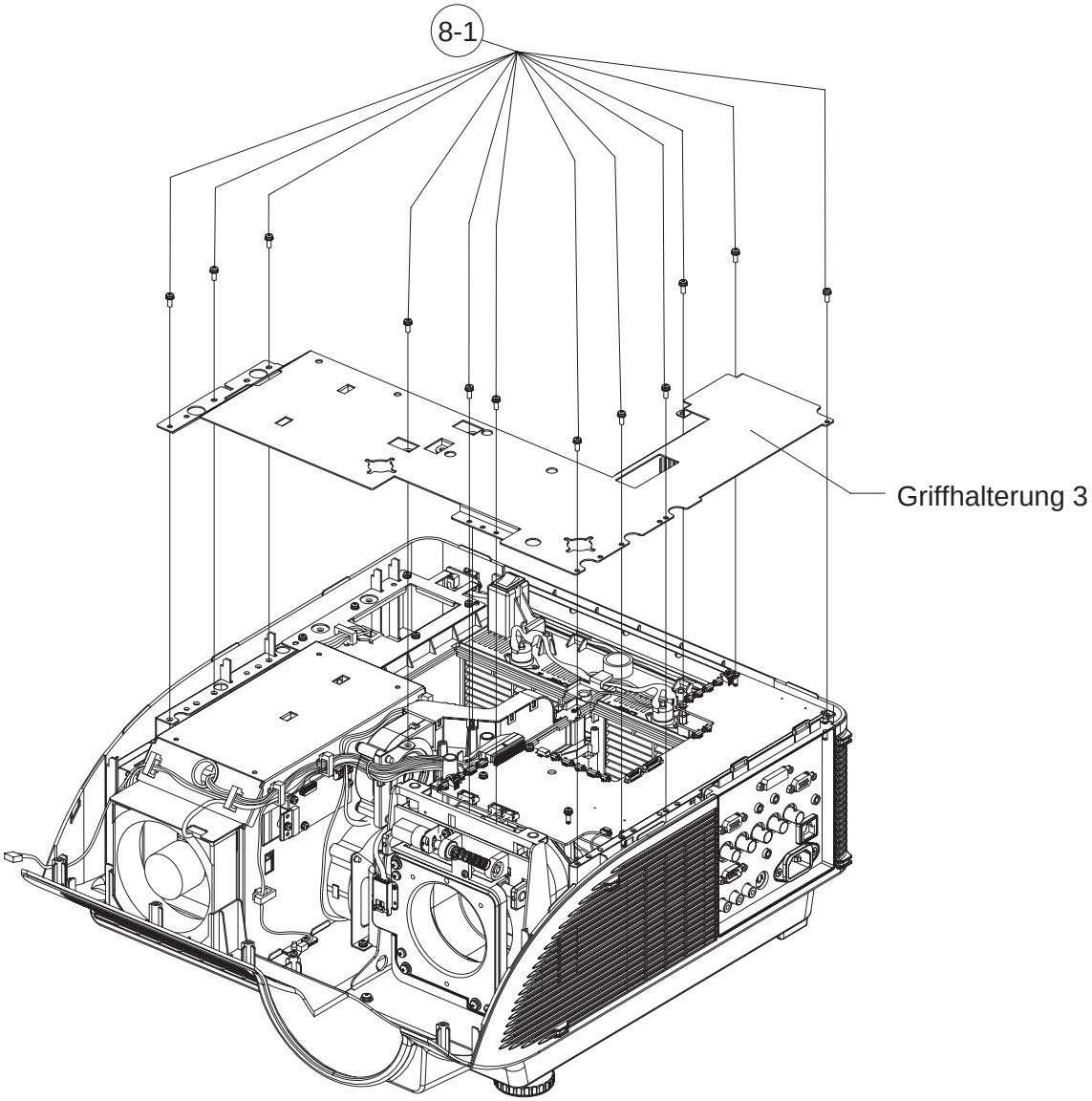
7-1. Die Schraube an der IR(VOLDER)-Einheit losdrehen, um sie abzunehmen; danach den Anschluss für die IR(VOLDER)-Einheit abtrennen.

7-2. Die sechzehn Schrauben am oberen Gehäuse losdrehen, um es heraufzuziehen.



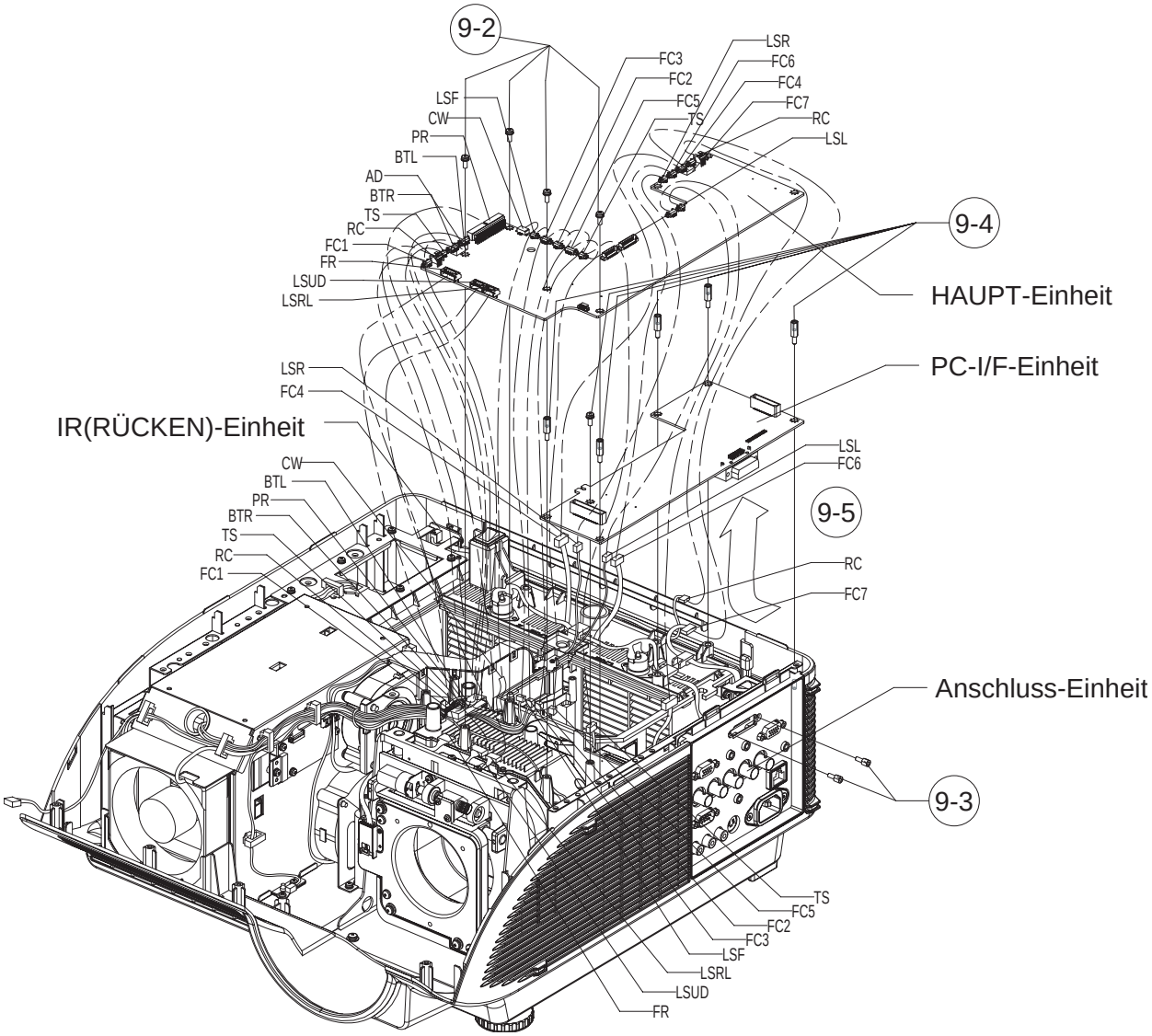
8. Entfernung der Griffhalterung 3

8-1. Die zwölf Schrauben an der Griffhalterung 3 losdrehen, um die Griffhalterung 3 abzunehmen.



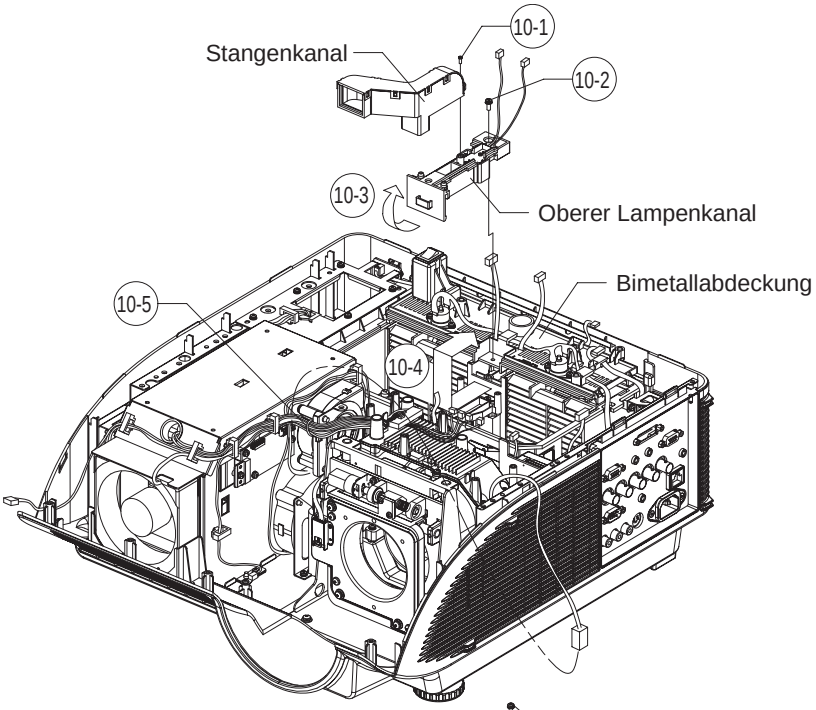
9. Entfernung der Leiterplatten-Baugruppen

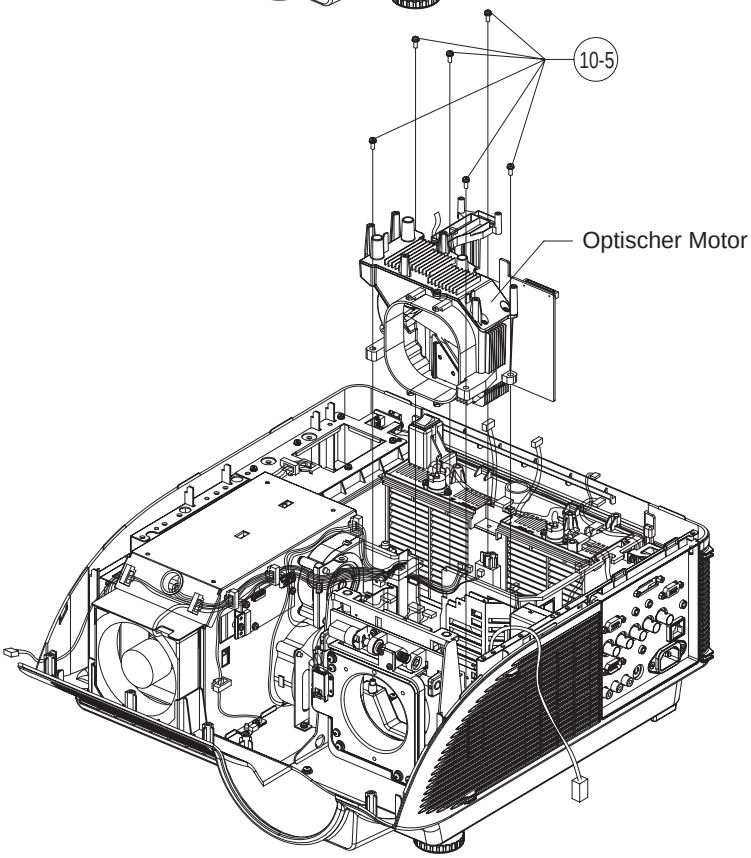
9-1. All die Anschlüsse von HAUPT-Einheit abtrennen.
9-2. Die vier Schrauben an HAUPT-Einheit losdrehen. HAUPT-Einheit von der PC-I/F-Einheit abnehmen.
9-3. Die beiden Distanzstücke von der PC-I/F-Einheit entfernen.
9-4. Die fünf Schrauben entfernen und die Schraube losdrehen.
9-5. Die PC-I/F-Einheit von der Anschluss-Einheit abtrennen, und anschließend die PC-I/F-Einheit abnehmen.



10.Entfernung des optischen Motors

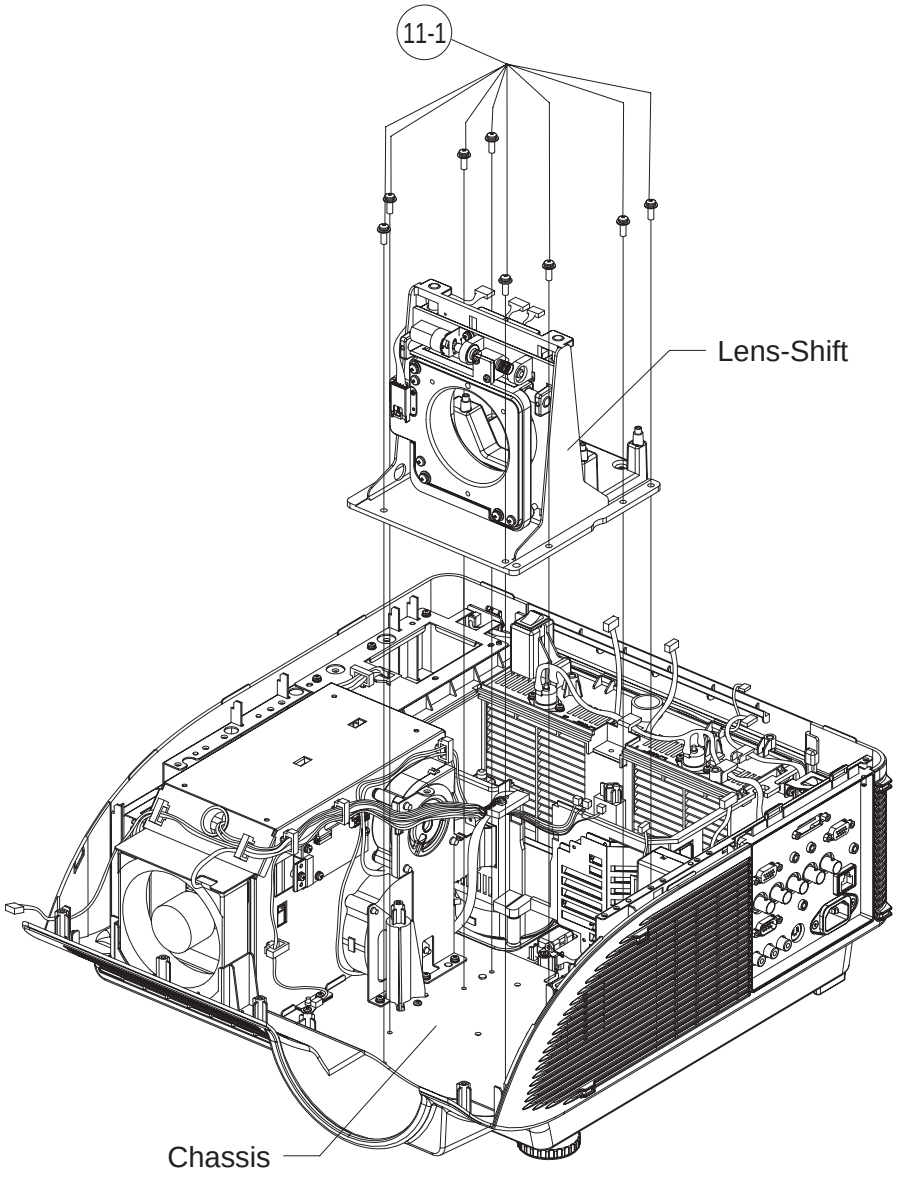
10-1. Die Schraube am Stangenkanal losdrehen, um ihn abzunehmen.
10-2. Die Schraube am oberen Lampenkanal losdrehen.
10-3. Die Vorderseite der oberen Lampenkanal aushaken, um diesen abzunehmen.
10-4. Die Bimetallabdeckung schieben, um sie abzunehmen.
10-5. Den Kabelbinder loslasse, und anschließend den linken Lautsprecheranschluss abtrennen. Die sechs Schrauben am optischen Motor losdrehen, und anschließend den optischen Motor abheben.





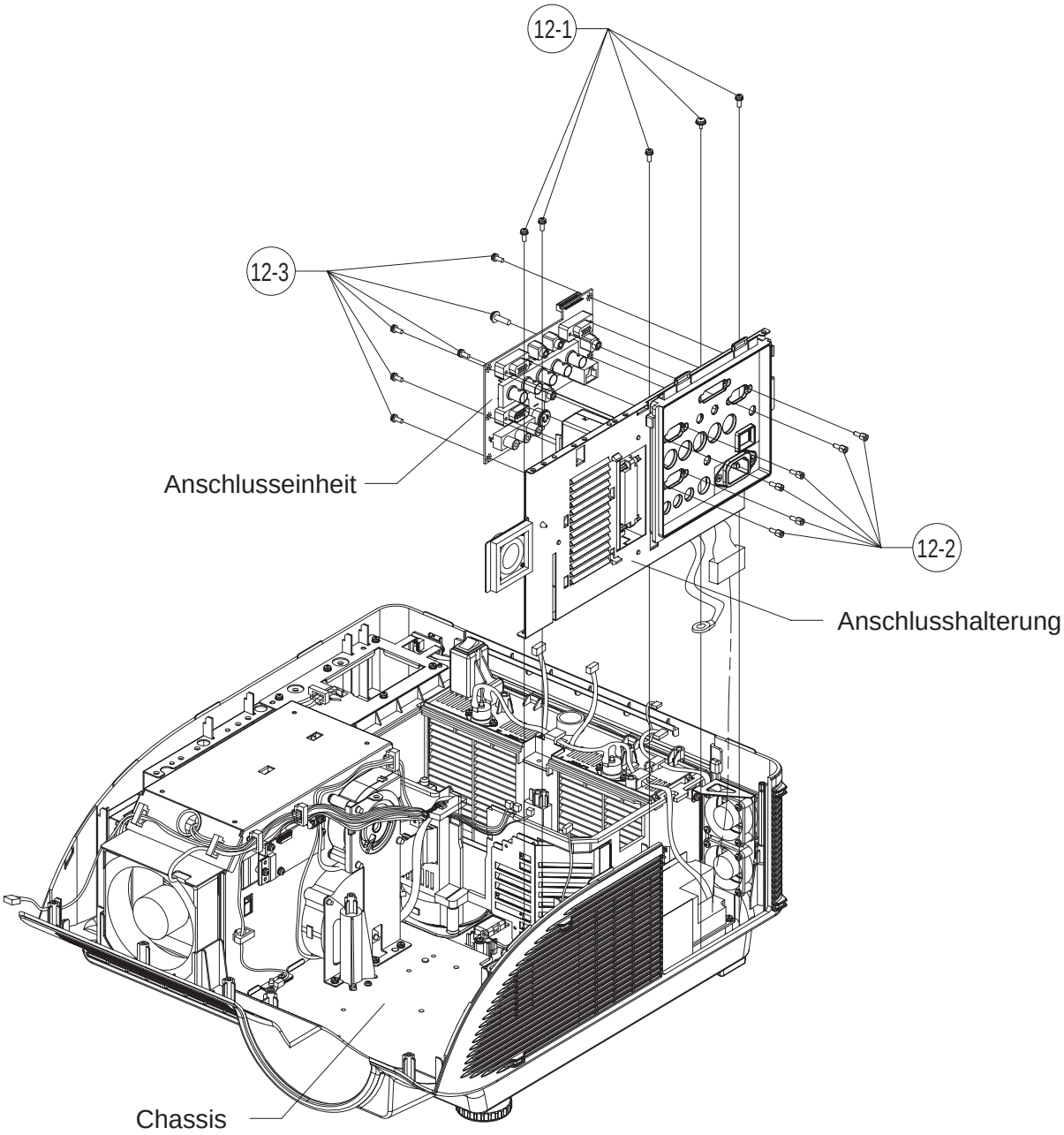
11.Entfernung des Lens-Shifts

11-1. Die acht Schrauben am Lens-Shift losdrehen, und anschließend den Lens-Shift abheben.



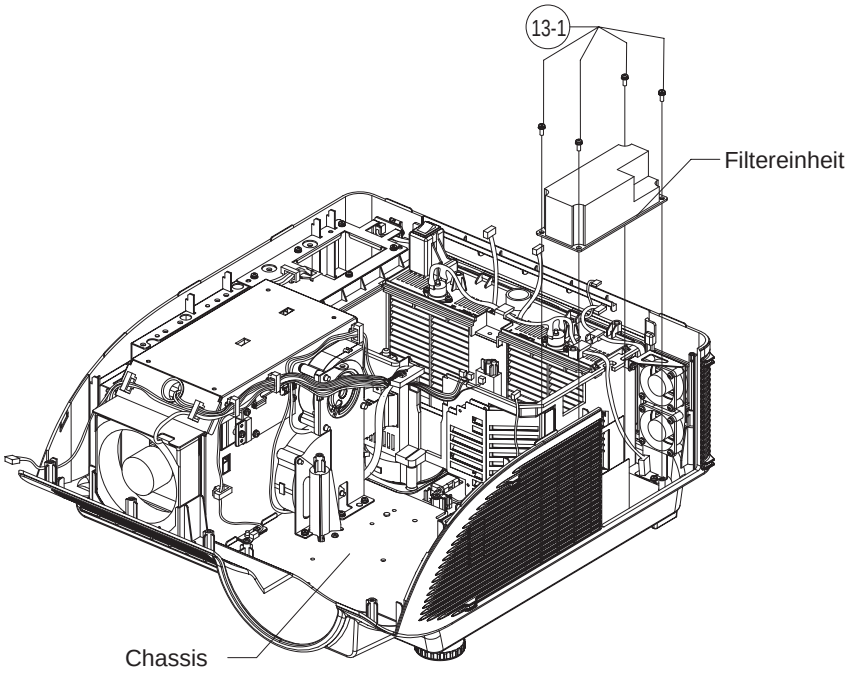
12.Entfernung der Anschlusseinheit

12-1.Die fünf Schrauben an der Anschlusshalterung losdrehen; danach sie anheben, um die Netzanschlussbuchse abzutrennen.
12-2.Die sechs Distanzstücke an der Anschlusseinheit entfernen.
12-3.Die sechs Schrauben an der Anschlusseinheit losdrehen, um sie anzunehmen.



13.Entfernung der Filtereinheit

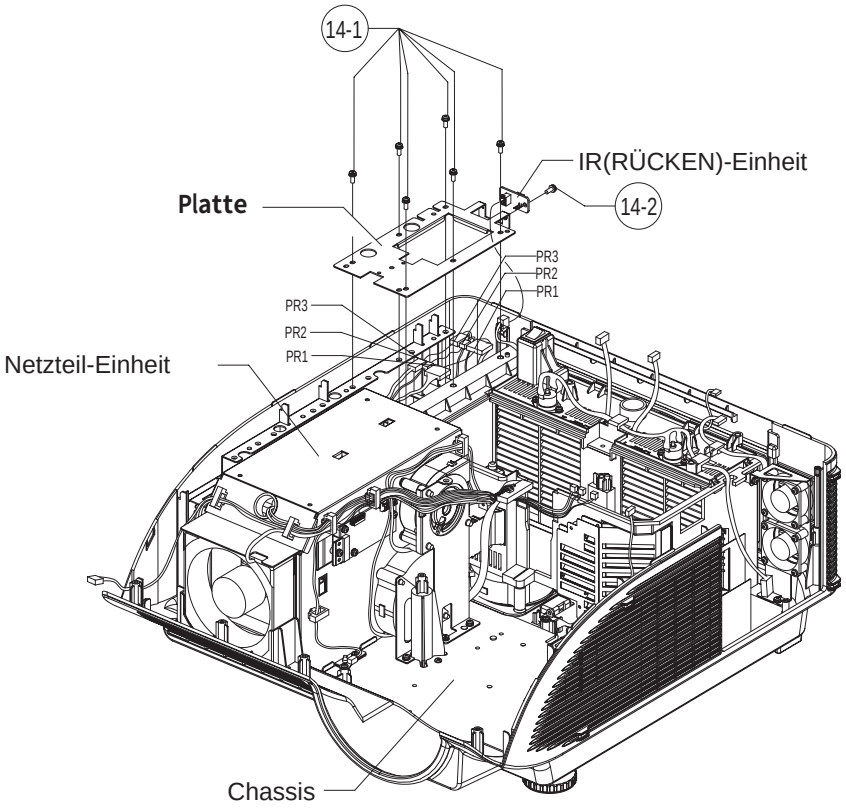
13-1.All die Anschlüsse von der Filtereinheit abtrennen. Die vier Schrauben an der Filtereinheit losdrehen, um sie abzunehmen.



14.Entfernung der IR(RÜCKEN)-Einheit

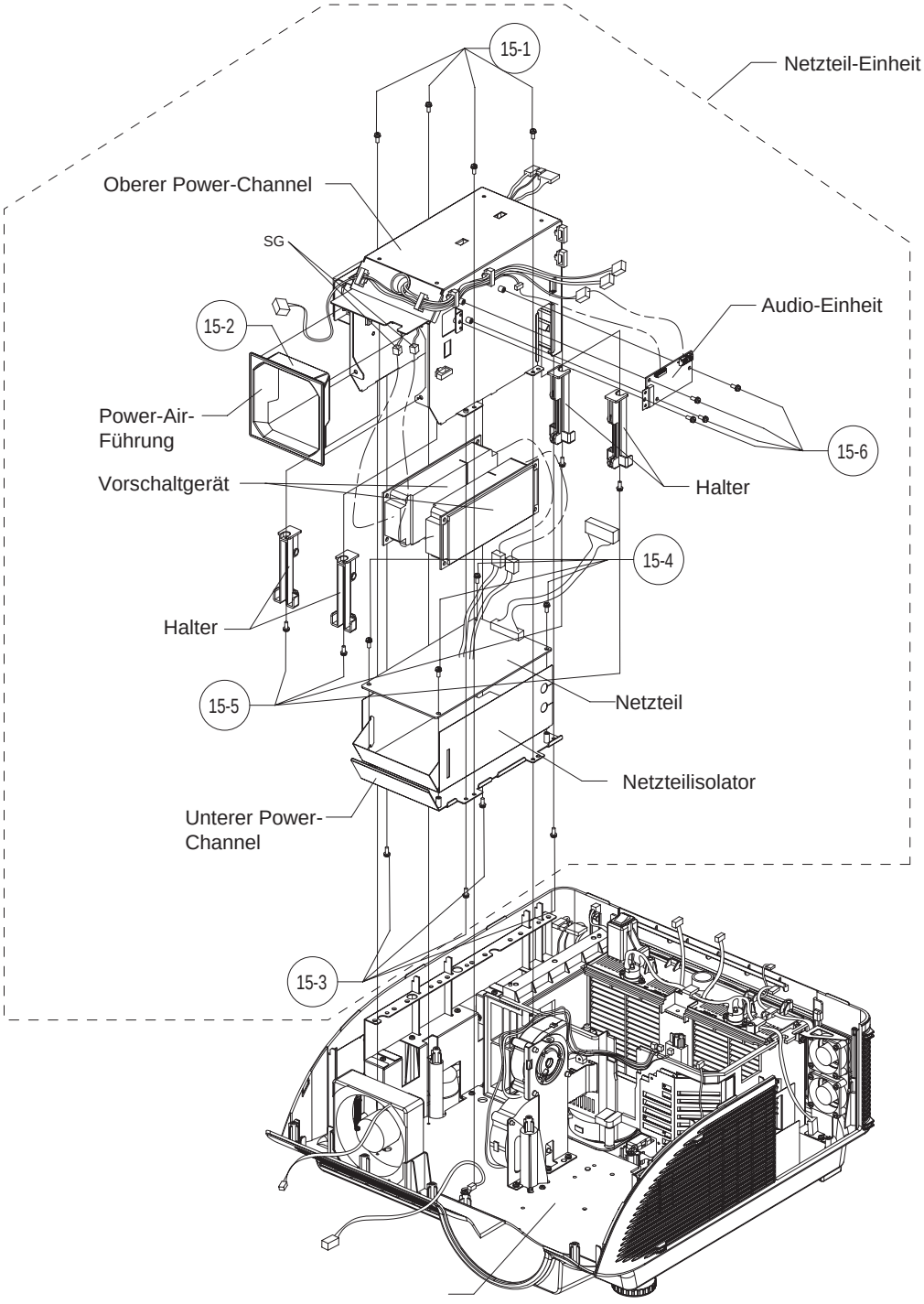
14-1.All die Anschlüsse von der Netzteil-Einheit abtrennen. Die sechs Schrauben an der Platte losdrehen, um sie anzunehmen.

14-2.Die Schraube an der IR(RÜCKEN)-Einheit losdrehen, um die IR(RÜCKEN)-Einheit abzunehmen.



15.Entfernung von Netzteil-Einheit und Audio-Einheit

15-1. Die vier Schrauben an der Netzteil-Einheit losdrehen.
15-2. Die Power-Air-Führung vom oberen Power-Channel abnehmen.
15-3. Die vier Schrauben am unteren Power-Channel losdrehen, und anschließend die beiden Netzanschlüsse PR abtrennen.
15-4. Die vier Schrauben am Netzteil losdrehen, um es abzunehmen.
15-5. Die vier Schrauben an den Haltern losdrehen, und anschließend die Signalanschlüsse SG abtrennen.
15-6. Die vier Schrauben an der Audio-Einheit losdrehen, um sie abzunehmen.

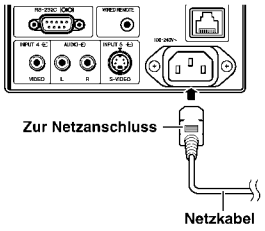


RÜCKSTELLEN DES LAMPENBETRIEBSZEIT-TIMERS

● **Rückstellung des Lampen-Timers**
Den Lampen-Timer nach dem Lampenaustausch zur ü ckzustellen.

Info
- Stellen Sie sicher, dass Sie den Lampen-Timer nur nach dem Austausch der Lampe zurücksetzen. Wenn Sie den Lampen-Timer zurückstellen und dieselbe Lampe weiterhin verwenden, könnte die Lampe beschädigt werden oder explodieren.

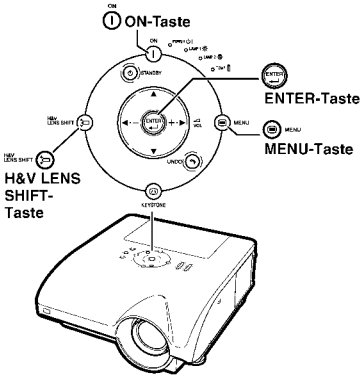
1 Das Netzkabel anschließen.
- Das Netzkabel am Netzanschluss des Projektors anschließen.



2 Den Lampen-Timer zurückstellen.

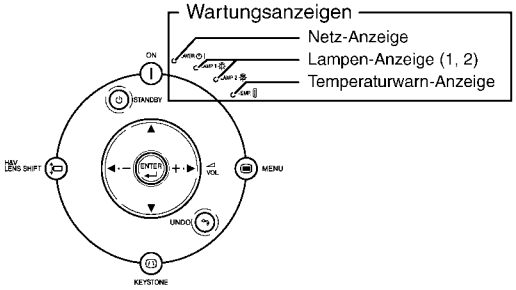
Für Lampe 1
- Zum Rücksetzen des Lampen-Timers für Lampeneinheit AN-PH50LP1 die beiden Tasten MENU und ENTER gleichzeitig gedrückt halten und zusätzlich die Taste ON am Projektor drücken.
- „LAMP1 100%“ erscheint und zeigt damit an, dass der Lampen-Timer zurückgestellt wurde.

Für Lampe 2
- Zum Rücksetzen des Lampen-Timers für Lampeneinheit AN-PH50LP2 die beiden Tasten MENU und ENTER gleichzeitig gedrückt halten und zusätzlich die Taste ON am Projektor drücken.
- „LAMP2 100%“ erscheint und zeigt damit an, dass der Lampen-Timer zurückgestellt wurde.



Lampe
- Es wird empfohlen, die Lampeneinheit (optionales, AN-PH50LP1 und AN-PH50LP2) auszutauschen, wenn die Lampen-Lebensdauer 5 % oder weniger beträgt, oder wenn Sie eine deutliche Verschlechterung der Bild- und Farbqualität feststellen. Die Lampen-Lebensdauer (Prozentsatz) kann auf der Bildschirmanzeige überprüft werden.
- Erwerben Sie über einen Sharp-Projektor-Händler oder Kundendienstbetrieb in Ihrer Nähe eine Lampeneinheit des Typs AN-PH50LP1 und AN-PH50LP2.

- **Die Warnleuchten am Projektor weisen auf Fehlfunktionen im Projektor hin.**
- **Falls ein Problem auftritt, leuchtet entweder die Temperaturwarn-Anzeige oder die Lampen-Anzeige rot auf und der Projektor wird in den Standby-Modus geschaltet. Nachdem der Projektor in den Standby-Modus geschaltet worden ist, den unten aufgeführten Schritten folgen.**



Über die Temperaturwarn-Anzeige

Wenn die Temperatur im Inneren des Projektors aufgrund blockierter Lüftungsöffnungen oder wegen Problemen bei der Aufstellung ansteigt, leuchtet „ “ in der unteren linken Ecke des Bildes auf. Wenn die Temperatur weiter ansteigt, schaltet sich die Lampe aus und die Temperaturwarn-Anzeige blinkt; der Kühlventilator dreht sich für weitere 90 Sekunden und anschließend wird der Projektor in den Standby-Modus geschaltet. Nachdem „ “ erscheint, führen Sie auf jeden Fall die Maßnahmen aus wie auf Seite **92** beschrieben.

Wartungsanzeige			Problem	Ursache	Mögliche Lösung
	Normal	Anormal			
Temperaturwarn-Anzeige Warnanzeige	Aus	Rot leuchtend (Standby)	Die interne Temperatur ist ungewöhnlich hoch.	• Blockierter Belüftungseinlass	• Stellen Sie den Projektor so auf, dass er ordnungsgemäß belüftet wird.
				• Defekter Lüfter • Fehler im internen Kreislauf • Verstopfter Belüftungseinlass • Grün blinkt, wenn die Lampe aufwärmt.	• Bringen Sie den Projektor zu einem autorisierten Sharp-Projektor-Händler oder Kundendienstbetrieb in Ihrer Nähe. • Reinigen Sie die Luftaustritts- und Einsaugöffnungen.
Lampen-Anzeige (1, 2)	Grün leuchtend (Grün blinkt, wenn die Lampe aufwärmt.	Rot leuchtend	Die Lampe leuchtet nicht.	• Die Lampe wird anormal ausgeschaltet.	• Das Netzkabel vom Netzanschluss abtrennen, und stecken ihn erneut ein.
			Wechseln Sie die Lampe.	• Die verbleibende Lampen-Lebensdauer beträgt 5 % oder weniger.	• Tauschen Sie die Lampe vorsichtig aus. • Bringen Sie den Projektor zu einem autorisierten Sharp-Projektor-Händler oder Kundendienstbetrieb in Ihrer Nähe. • Gehen Sie beim Austauschen der Lampe sehr vorsichtig vor.
		Rot leuchtend (Standby)	Die Lampe leuchtet nicht.	• Durchgebrannte Lampe • Fehler im Lampenkreislauf	
Netz-Anzeige	Grün leuchtend / Rot leuchtend	Rot blinkt	Die Netz-Anzeige blinkt bei eingeschaltetem Projektor rot auf.	• Die Lüftungsabdeckung ist geöffnet	• Befestigen Sie die Abdeckungen sicher. • Sollte die Netzanzeige auch bei korrekt eingesetzter Lüftungsabdeckung blinken, wenden Sie sich bitte an Ihren nächsten autorisierten Sharp-Projektor-Händler oder an unseren Kundendienst.

Info

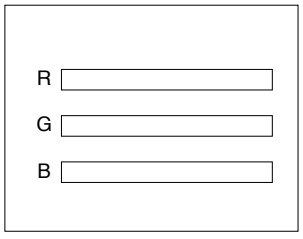
- Wenn die Temperaturwarn-Anzeige blinkt und der Projektor in den Standby-Modus geschaltet wird, leuchtet die Temperaturwarn-Anzeige auf. Prüfen Sie, ob die Lüftungsöffnungen verstopft oder blockiert sind und versuchen Sie dann, das Gerät wieder einzuschalten. Warten Sie bis der Projektor vollständig abgekühlt ist, bevor Sie das Netzkabel anschließen und das Gerät wieder einschalten. (Mindestens 10 Minuten.)
- Wenn die Stromversorgung in Folge eines Stromausfalls oder aus anderen Gründen während der Verwendung des Projektors kurzzeitig unterbrochen wird, leuchtet die Lampen-Anzeige möglicherweise rot auf, und die Lampe bleibt ausgeschaltet. Ziehen Sie in diesem Fall das Netzkabel vom Netzanschluss abtrennen, setzen Sie ihn wieder ein, und schalten Sie den Projektor wieder ein.
- Ziehen Sie nach dem Aktivieren des Standby-Modus nicht den Netzstecker, solange der Projektor noch läuft. Der Lüfter läuft ca. 90 Sekunden nach.

ELEKTRISCHE EINSTELLUNG

- Die Stromversorgung einschalten (Lampe eingeschaltet), und zur Alterung für 15 Minuten warten.
- Mit Hilfe von S3602 (Takt-Schalter) auf der Hauptleiterplatte in den Einstellungsprozess-Modus umschalten. Wenn das obere Gehäuse S3602 bedeckt, die folgenden Tasten der Reihe nach drücken.
  Tastatur: On -> Up -> Down -> Up -> Enter -> Enter -> Menu
  Fernbedienung: On Vol up -> Vol down -> Vol up -> Vol down -> Enter -> Enter -> Menu

* Sie können auf die gleiche Weise den Werksmodus beenden.(Anderenfalls ist "EXIT" im Prozessmodus auszuwählen.)

- Mit der Taste DOWN oder UP die einzustellende Gruppe auswählen, und per Druck auf die Taste ENTER auf der Fernbedienung oder Tastatur den Einstellgegenstand eingeben.
- Mit der Taste DOWN oder UP den Einstellgegenstand auswählen.
- Zur Einstellung die Taste LEFT oder RIGHT benutzen.
- Zum Zurückkehren vom Einstellgegenstand zur Einstellgruppe die Taste UNDO oder MENU benutzen.
- Mit der Taste MUTE das interne Prüfmuster und Eingangssignal ändern.

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
1	**EEPROM wird initialisiert**	1. Die Stromversorgung einschalten (die Lampe leuchtet auf), und das System für 15 Minuten aufwärmen. 2. Die folgende Gruppe und Objekt wählen. Gruppe : SSS Objekt : S2	1. S3602 drücken, um in den Prozessmodus umzuschalten. 2. Im Menü SSS den S2-Befehl ausführen. * Mit dem S2-Befehl werden all die Schaltplatten außer der PC-Leiterplatte initialisiert. (Hinweis:) Da die PC-Schnittstelleneinheit mit S1 initialisiert wird, S1 nicht ausführen. Die PC-Schnittstelleneinheit ist bereits eingestellt. Wenn die PC-Schnittstelleneinheit eingestellt werden muss (S1 wird versehentlich ausgeführt), diese entsprechend dem "Einstellverfahren für die PC-Schnittstelleneinheit" am Ende dieses Dokumentes einstellen. 3. Für ca. 30 Sekunden warten; wenn "INPUT1" erscheint, das Gerät ausschalten. 4. Nach dem Stoppen sämtlicher Ventilatoren das Gerät wieder einschalten.
2	**Schreiben der MAC-Adresse**		1. Einen Aufkleber lesen, auf dem die MAC-Adresse auf der Hauptleiterplatte geschrieben ist. 2. Über das 232C Serial-Kabel die MAC-Adresse schreiben. (Verfahren finden Sie im Anhang.)
3	**Einstellung von CW index**	1. Signaleingang: 64-STEP-Farbbalkensignal 2. Die folgende Gruppe und Objekt wählen. Gruppe : DLP Objekt : CW-INDEX	1. INPUT1 das Signal zuführen. 2. Ein Objekt auswählen und eine Einstellung machen, sodass die Gleichförmigkeit ausgeglichen ist. 

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
4	**Einstellung der DLP-Spannung**	1. Den Spannungsbereich der DLP-Beschreibung lesen. 2. Die folgende Gruppe und Objekt wählen. Gruppe : DLP Objekt : DMD-BIN	1. Entsprechend dem Rang, der gelesen worden ist (auf der Hauptleiterplatte), DMD-BIN einstellen. Rang / Einstellwert B / 0 C / 1 D / 2 E / 3 * Beim Auswechseln des DLP-Chips oder der PC-Leiterplatte die Einstellung durchführen.
5-1	**Video-Helligkeit Einstellung**	1. Die folgenden Gruppen und Positionen wählen: Gruppe : VIDEO Objekt : BRIGHT	1. Überprüfen, dass der Wert 115 beträgt.
5-2	**Video-Kontrast-einstellung**	1. Die folgenden Gruppen und Positionen wählen: Gruppe : VIDEO Objekt : PICTURE-SUB	1. Überprüfen, dass der Wert 96 beträgt.
6	**Einstellung der Komponenten-Cr/Cb-Abweichung (1)**	1. INPUT1 das Farbdifferenz-signal (480i) zuführen. Y-0%-Helligkeit. Cb- und Cr-0%-Weiß-muster. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : COMPO Objekt : COMPO-AUTO	1. Nach dem Signaleingang zur automatischen Einstellung COMPO-AUTO auswählen.
7	**Einstellung der Komponenten-Helligkeit**	1. INPUT1 das Farbdifferenz-signal (480i) zuführen. Y-0%-Helligkeit. Cb- und Cr-0%-Weiß-muster. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : COMPO Objekt : G-BRIGHT	1. Die Einstellung machen, sodass gewisse Bits im Bild fehlen. * Beziehen Sie sich auf das Fotobild.
8	**Einstellung der Komponenten-Cr/Cb-Abweichung (2)**	1. INPUT1 das Farbdifferenz-signal (480i) zuführen. Y-0%-Helligkeit. Cb- und Cr-0%-Weiß-muster. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : COMPO Objekt : CR-OFFSET	1. Den CR-OFFSET-Wert um 2 Punkte reduzieren.
9	**RGB-Weißbalance-Einstellung**	1. INPUT1 das 50%-Graumustersignal (XGA, 60 Hz) zuführen. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : DLP Objekt : R1-GAIN (Red) B1-GAIN (Blue)	1. R-1 GAIN und B1-GAIN einstellen, sodass der x-Wert 290±3 beträgt und der y-Wert 310±3.

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
10	**sRGB-Weißbalance-Einstellung**	1. Das Graumustersignal mit 50% des Amplitudenpegels von XGA 60 Hz zuführen. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : DLP Objekt : S-G1-GAIN (Green) S-B1-GAIN (Blue)	1. S-G1-GAIN und S-B1-GAIN einstellen, sodass der x-Wert 313±5 beträgt und der y-Wert 329±5.
11	**Video-Weißbalance-Einstellung**	1. INPUT4 das 50%-Graumustersignal (NTSC, Burst-Signal) zuführen. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : DLPV Objekt : V-R1-GAIN (Red) V-B1-GAIN (Blue)	1. V-R1-GAIN und V-B1-GAIN einstellen, sodass der x-Wert 290±3 beträgt und der y-Wert 310±3.
12	**DTV-Weißbalance-Einstellung**	1. INPUT1 das 50%-Graumustersignal (480i, Farbdifferenzsignal) zuführen. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : DLPV Objekt : C-R1-GAIN(Red) C-B1-GAIN(Blue)	1. V-R1-GAIN und V-B1-GAIN einstellen, sodass der x-Wert 290±3 beträgt und der y-Wert 310 ± 3.
13	**Ausgabe-Einstellwerte**	1. Die folgenden Gruppen und Positionen wählen: Gruppe : SSS Objekt : S4 (Nordamerika) S3 (Europa/Asien/Australien) S5 (Japan)	1. Die folgenden Einstellungen machen. PH50UX : S4 (für Nordamerika) PH50X : S5 (für Japan) Andere : S3 (für Europa/Asien/Australien)

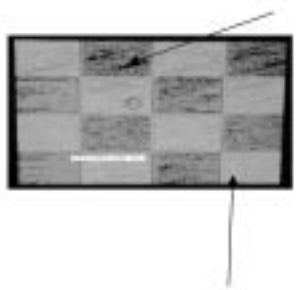
Für Referenz/Einstellung

	OSD-Sprache	Video-Pegel
S3	Englisch	0IRE
S4	Englisch	7.5IRE
S5	Japanisch	0IRE

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
14	**Lens-Shift Position**		1. Die Lens-Shift Position bewegen. Vertikal : Oberste Stellung Horizontal : Mitte
15	**Die Stromversorgung ausschalten**		

PC-Schnittstellen-Einstellverfahren

(Hinweis)
Da die PC-Schnittstelleneinheit mit S1 initialisiert wird, S1 nicht ausführen. Die PC-Schnittstelleneinheit ist bereits eingestellt.
Wenn die PC-Schnittstelleneinheit eingestellt werden muss (S1 wird versehentlich ausgeführt), diese entsprechend dem Folgenden einstellen.

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
1	**EEPROM wird initialisiert**	1. Die folgenden Gruppen und Positionen wählen: Gruppe : SSS Objekt : S1	1. S3602 drücken, um in den Prozessmodus umzuschalten. 2. Im Menü SSS den S2-Befehl ausführen. (Durch S1 werden all die Inhalte von EEPROM initialisiert.)
2	**Einstellung der RGB-Farbton-wiedergabe**	1. INPUT1 das Fenster-mustersignal mit 92%-(0,64Vbw) und 0%-Signalen (XGA/60Hz) zuführen. 2. Die folgenden Gruppen und Positionen wählen: Gruppe : A/D Objekt : AD-AUTO * Wenn Sie nicht das 92%-Signal vorbereiten können 1. INPUT1 das Fenster-mustersignal mit 100%-(0,7Vbw) und 0%-Signalen (XGA/60Hz) zuführen. * Die “mute”-Taste wechselt zum Werksgamma.	1. Nach dem Signaleingang zur automatischen Einstellung COMPO-AUTO auswählen. 1. Die folgenden Gruppen und Positionen wählen: Gruppe : A/D Objekt : G-BRIGHT 2. Die Einstellung machen, sodass gewisse Bits im schwarzen Bereich des Bildes fehlen.  3. Die folgenden Gruppen und Positionen wählen: Gruppe : A/D Objekt : G-D 4. Die Einstellung machen, sodass gewisse Bits im weißen Bereich des Bildes fehlen. 5. Das folgende Objekt auswählen. Objekt: R-BRIGHT 6. Die Einstellung machen, sodass gewisse Bits im schwarzen Bereich des Bildes fehlen. 7. Das folgende Objekt auswählen. Objekt: R-D 8. Die Einstellung machen, sodass gewisse Bits im weißen Bereich des Bildes fehlen. 9. Das folgende Objekt auswählen. Objekt: R-BRIGHT 10. Die Einstellung machen, sodass gewisse Bits im schwarzen Bereich des Bildes fehlen. 11. Das folgende Objekt auswählen. Objekt: B-D 12. Die Einstellung machen, sodass gewisse Bits im weißen Bereich des Bildes fehlen.

Schreiben der MAC-Adresse (Schreiben) Die folgenden 232C-Befehle der Reihe nach senden.

1. | _ | L | M | A | 0 | 0 | *1 | *2 | Taste "enter"
   Auf “OK” warten.
2. | _ | L | M | A | 1 | 0 | *3 | *4 | Taste "enter"
   Auf “OK” warten.
3. | _ | L | M | A | 2 | 0 | *5 | *6 | Taste "enter"
   Auf “OK” warten.
4. | _ | L | M | A | 3 | 0 | *7 | *8 | Taste "enter"
   Auf “OK” warten.
5. | _ | L | M | A | 4 | 0 | *9 | *10 | Taste "enter"
   Auf “OK” warten.
6. | _ | L | M | A | 5 | 0 | *11 | *12 | Taste "enter"

*1 das erste Byte
*2 das zweite Byte
*3 das dritte Byte
*4 das vierte Byte
*5 das fünfte Byte
*6 das sechste Byte
*7 das siebte Byte
*8 das achte Byte
*9 das neunte Byte
*10 das 10. Byte
*11 das 11. Byte
*12 das 12. Byte

(Lesen) Die folgenden 232C-Befehle senden.

| _ | L | M | A | | | | 1 | Taste "enter"

Die MAC-Adresse erscheint auf dem Bildschirm.

Schreiben der Seriennummer (Schreiben) Die folgenden 232C-Befehle der Reihe nach senden.

1. | S | N | _ | 1 | 1 | 2 | 3 | 4 | Taste "enter"
   Auf “OK” warten.
2. | S | N | _ | 2 | 5 | 6 | 7 | 8 | Taste "enter"
   Auf “OK” warten.
3. | *1 | *2 | *3 | *4 | *5 | *6 | *7 | *8 | *9 | *10 | *11 | *12 | Taste "enter"
   *1-*12/Seriennummer
4. | *1 | *2 | *3 | *4 | *5 | *6 | *7 | *8 | *9 | *10 | *11 | *12 | Taste "enter"
   Auf “OK” warten.
   Die gleichen Daten wie bei Schritt 3

Hinweis:
Ist die Stellenzahl der Seriennummer kürzer als zwölf Stellen, dann das Leerzeichen “ “ benutzen.
Zum Beispiel
Die Seriennummer ist "1311163".

| | | | | | 1 | 3 | 1 | 1 | 1 | 6 | 3 | Taste "enter"

Die Seriennummer ist "412311112"

| | | | 4 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 2 | Taste "enter"

(Lesen) Die folgenden 232C-Befehle senden.

| S | N | R | D | | | | 1 | Taste "enter"

Die Seriennummer erscheint auf dem Bildschirm.

Überprüfen des Projektorstatus (Lesen) Die folgenden 232C-Befehle senden.

| T | F | C | K | | | | 1 | + "enter" key

Die Seriennummer erscheint auf dem Bildschirm.

Überprüfen des Projektorstatus
Im Benutzermenü die Gruppe "Option2" und anschließend den “Service-Modus” wählen.
Das Kennwort "9303" eingeben.

Einstellen des Service-Modus
- Mit der Taste DOWN oder UP die einzustellende Gruppe auswählen, und per Druck auf die Taste ENTER auf der Fernbedienung oder Tastatur den Einstellgegenstand eingeben.
- Mit der Taste DOWN oder UP den Einstellgegenstand auswählen.
- Zur Einstellung die Taste LEFT oder RIGHT benutzen.
- Zum Zurückkehren vom Einstellgegenstand zur Einstellgruppe die Taste UNDO oder MENU benutzen.

Hinweise
- Im Service-Modus wird der Benutzer-Einstellwert zum Standardwert gewechselt (Bild/CMS). Wenn Sie den Service-Modus beenden, wechselt der Einstellwert zum Benutzer-Einstellwert.
- Im Service-Modus werden die folgenden Funktionen annulliert. AV-Stummschaltung / Ton-Stummschaltung / Einfrieren / Vergrößerung / PinP
- Im Service-Modus ist die Taste “standby” auf der Fernbedienung oder auf dem Bedienfeld ungültig. Wenn Sie die Stromversorgung ausschalten möchten, den Service-Modus beenden.

Einstellung des Weißabgleichs
RGB-PC-Weißbalance-Einstellung

1. INPUT1 das RGB PC-Signal zuführen.
2. Die Gruppe "DLP" auswählen.
   PH50X wechselt automatisch zum INPUT1/RGB-Modus.

Gruppe	Objekt	Anfangswert	Bereich	Einstellung	Quelle/Modus
DLP	R1-BLK	0	±20	Helligkeit des Rots	INPUT1 / RGB
	R1-GAIN	0	±20	Kontrast des Rots	INPUT1 / RGB
	G1-BLK	0	±20	Helligkeit des Grüns	INPUT1 / RGB
	G1-GAIN	0	±20	Kontrast des Grüns	INPUT1 / RGB
	B1-BLK	0	±20	Helligkeit des Blaus	INPUT1 / RGB
	B1-GAIN	0	±20	Kontrast des Blaus	INPUT1 / RGB

Video-Weißbalance-Einstellung

1. Das Videosignal zuführen.
2. Die Gruppe "DLPV" auswählen.
   PH50X wechselt automatisch zum INPUT4-Modus.

Gruppe	Objekt	Anfangswert	Bereich	Einstellung	Quelle/Modus
DLPV	V-R1-BLK	0	±20	Helligkeit des Rots	INPUT4 / video
	V-R1-GAIN	0	±20	Kontrast des Rots	INPUT4 / video
	V-G1-BLK	0	±20	Helligkeit des Grüns	INPUT4 / video
	V-G1-GAIN	0	±20	Kontrast des Grüns	INPUT4 / video
	V-B1-BLK	0	±20	Helligkeit des Blaus	INPUT4 / video
	V-B1-GAIN	0	±20	Kontrast des Blaus	INPUT4 / video

DTV-Weißbalance-Einstellung

1. INPUT1 das Komponentensignal zuführen.
2. Die Gruppe "DLPV" auswählen.
   PH50X wechselt automatisch zum INPUT1/Komponenten-Modus.

Gruppe	Objekt	Anfangswert	Bereich	Einstellung	Quelle/Modus
DLPV	C-R1-GAIN	0	±20	Kontrast des Rots	INPUT1 / component
	C-G1-GAIN	0	±20	Kontrast des Grüns	INPUT1 / component
	C-B1-GAIN	0	±20	Kontrast des Blaus	INPUT1 / component

Memo: Der Einstellwert der Helligkeit ist gleich wie beim Video.

Einstellung des Videos

1. Das Videosignal zuführen.
2. Die Gruppe "VIDEO" auswählen.
   PH50X wechselt automatisch zum INPUT4-Modus.

Gruppe	Objekt	Anfangswert	Bereich	Einstellung	Quelle/Modus
VIDEO	PICTURE	0	±60	Kontrast	INPUT4 / video
	BRIGHT	0	±60	Helligkeit	INPUT4 / video
	TINT	0	±120	Farbton (bewirkt in nur NTSC)	INPUT4 / video
	N-COLOR	0	±120	Farbsättigung	INPUT4 / video
	AGC-CNT	0	0-1	Aut. Verstärkungssteuerung 0: AGC ein 1: AGC aus	INPUT4 / video
	DLY	0	±5		INPUT4 / video
	H-CENTER	0	±10		INPUT4 / video
	FILTER	0	±3	Filterverstärkung	INPUT4 / video

Einstellung des VIDEO-Bildes
Einstellung der VIDEO-Farbe
Einstellung der VIDEO-Verstärkungssteuerung
Einstellung der Verzögerung zwischen Chroma und Luminanz
Einstellung der VIDEO-Horizontalposition
Einstellung des VIDEO-Tiefpassfilters

Andere

Gruppe	Objekt	Anfangswert	Bereich	Einstellung	Quelle/Modus
VIDEO	COMP-FILTER	0	0-1	0: Filter aus, 1: Filter ein	INPUT1 / component
	RGB-FILTER	0	0-1	0: Filter aus, 1: Filter ein	INPUT1 / RGB
	A-DELAY	0	0-1	0: Verzögerung ein, 1: Verzögerung aus	INPUT4 / video

Umschaltung des Komponenten-Tiefpassfilters

Umschaltung des RGB-Tiefpassfilters

Umschaltung der Tonverzögerung des eingebauten Lautsprechers

initialization of adjustment value

RESET - Dieses Gegenstand auswählen und die Taste ENTER drücken.
Mit RESET kehrt der Wert in jedem Gegenstand von "DLP", "DLPV" und "VIDEO" zum Anfangswert zurück.

Internes Prüfmuster

Gruppe	Objekt	Anfangswert	Bereich	Signal
PATTERN	RGB	1	1-8	Rastersignal
	RGB[50]	1	1-8	50%-Rastersignal
	CROSS	1	1-9	Gekreuzte Schraffur
	FOCUS	1	1-2	"Checkered"-Signal
	STEP	1	1-2	8-Schritt/16-Schritt
	COLOR			Farbbalken
	CHR	1	1-4	Quer- und Vertikallinie

Firmwareversion

Gruppe	Objekt	Version
FIRMWARE	SUB	*.**
	MAIN-LOADER	*.**
	MAIN-ZIMAGE	*.**
	MAIN-MTD	*.**
	MAIN-JFFS	*.**

Netzwerk-Einstellung

Gruppe	Objekt	Adresse
NETWORK	IP ADDRESS	192.168.150.002
	MAC ADDRESS	**-**-**-**-**-**

Beenden des Service-Modus

Gruppe
EXIT

- Dieses Gegenstand auswählen und die Taste ENTER drücken.

Fehlermöglichkeit, wenn die Lampe auch beim Anschalten nicht aufleuchtet

1. Status der LED

- POWER leuchtet nicht auf.
  Die Sub-CPU (IC3603) startet nicht. Die peripheren Schaltungen überprüfen.

- POWER blinkt rot.
  Abstand von 0,5 Sekunden: Ventilatorfehlererkennung.
  (Dieses Gerät erkennt die Ventilatordrehzahl. Läuft der Ventilator langsamer als die voreingestellte untere Geschwindigkeitsgrenze, dann wird die Stromversorgung von der Schutzfunktion abgeschaltet, selbst wenn der Ventilator nicht vollständig stoppt.)
  Abstand von 1 Sekunde: Erkennung der untere Luftfilterabdeckung (RCS).
  Abstand von 2 Sekunden: Kommunikationsfehler zwischen Sub-CPU (IC3603) und Haupt-CPU (IC8003).

- LAMP LED blinkt rot.
  Abstand von 1 Sekunde: Lampenblattschalter-Erkennung.
  (Die Stromversorgung schaltet sich nicht ein, wenn die Lampenkassette vom Gerät entfernt wird.)

2. Statusprüfung über serielle RS232C-Kommunikation
   Über die 232C-Kommunikation "TFCK△△△1"+ENTER,"TABN△△△1" senden, um den Projektorstatus zu überprüfen.

   Beispiel für Rückgabewerte des normalen Geräts
   TFCK 1
   [RCS] Close
   [Lamp1 Leaf] Close
   [Lamp2 Leaf] Close
   [Main-Sub] Communication OK.
   [Fan] Normal
   [pwm Fan1] No error
   [pwm Fan2] No error
   [pwm Fan3] No error
   [pwm Fan4] No error
   [pwm Fan5] No error
   [pwm Fan6] No error
   [dac Fan0] No error
   [dac Fan1] No error
   [Temperature] Normal
   [Lamp1 Non Light] Normal
   [Lamp2 Non Light] Normal
   [Lamp Life1] Normal
   [Lamp Life2] Normal
   OK

3. Andere

- Die Lampe leuchtet nicht auf, wenn der Farbradmotor nicht läuft.
- Die Lampe leuchtet nicht auf, wenn der Thermistorsensor nicht angeschlossen wird (z.B. Leitungsbruch).

- Bei einem Kommunikationsfehler zwischen IC8003 und IC8025 leuchtet die Lampe nicht auf.

4. Deaktivierung der Sensoren
   Vorsicht: Wenn das Gerät mit deaktivierten Sensoren dem Benutzer zurückgegeben wird, kann das Gehäuse durch die Hitze deformiert werden, da die Schutzfunktion nicht arbeitet. Nach Beendigung der Prüfung müssen die Sensoren in den ursprünglichen Zustand wiederhergestellt werden.

- Temperatursensor
  Einen Widerstand von 10 kΩ zwischen den Stiften 1 und 2 von CN7205 und 12 k_ zwischen den Stiften 1 und 2 von CN7005 montieren, um mit demontiertem Sensor die Stromversorgung einzuschalten. Da das Gerät auf dem Sensortemperatur-Fixed-Mode eingestellt wird, wird die Ventilatordrehzahl auf die niedrige Geschwindigkeit fixiert. Nach Beendigung der Prüfung müssen die Widerstände entfernt werden.

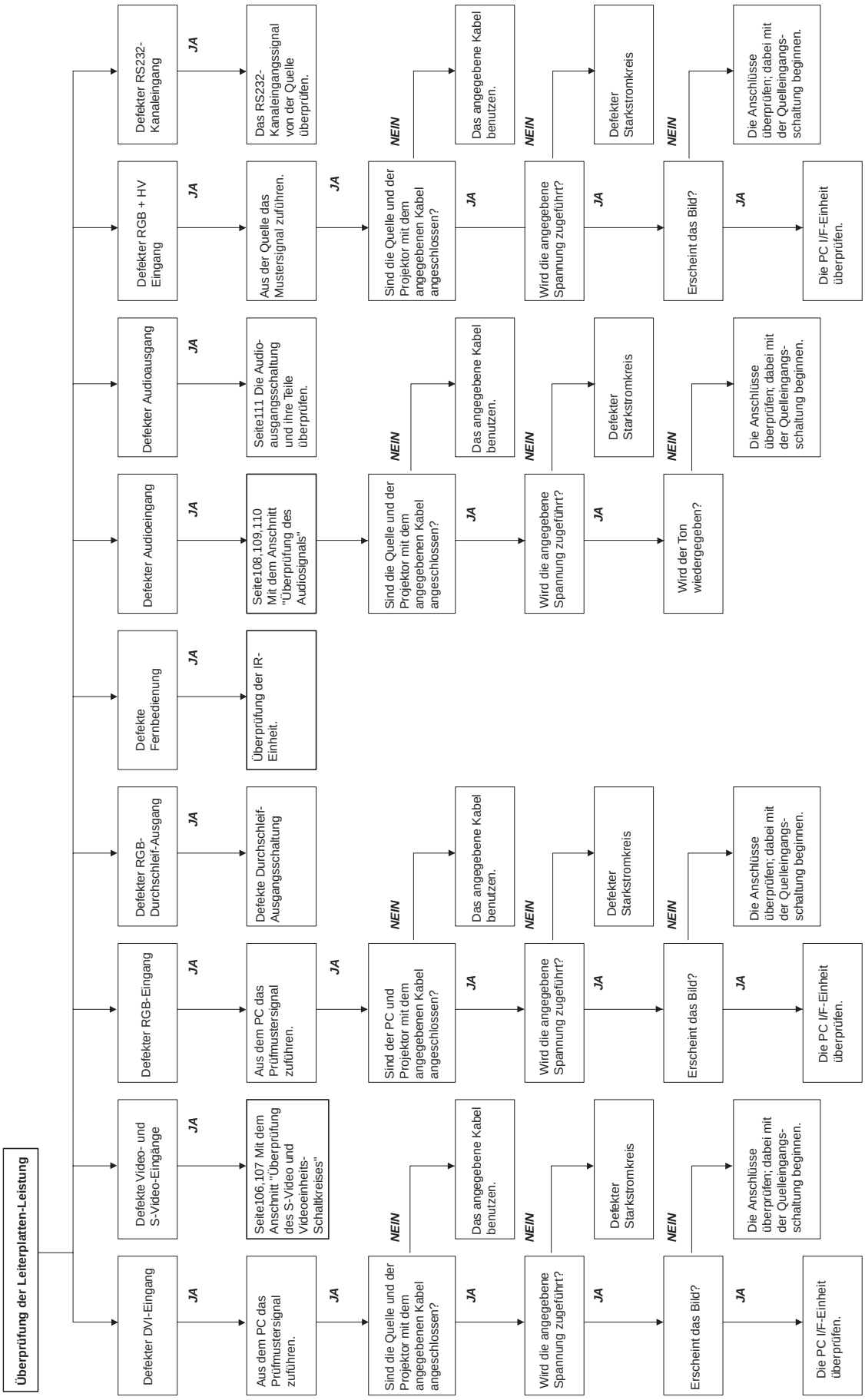
- Erkennung der Ventilatorverriegelung
  Dieses Gerät erkennt den Impuls des Ventilators. Beim Überprüfen des Leiterplattenbetriebs ohne Ventilatorlauf ist der Stift C8 von IC3603 (an der Stift-C8-Seite von R3727) mit einem Überbrückungsdraht an GND anzuschließen. Selbst wenn der Ventilator nicht läuft, führt das Gerät den Betrieb fort; dies beeinträchtigt die Zuverlässigkeit von Teilen. Nach Beendigung der Prüfung muss der Überbrückungsdraht entfernt werden.

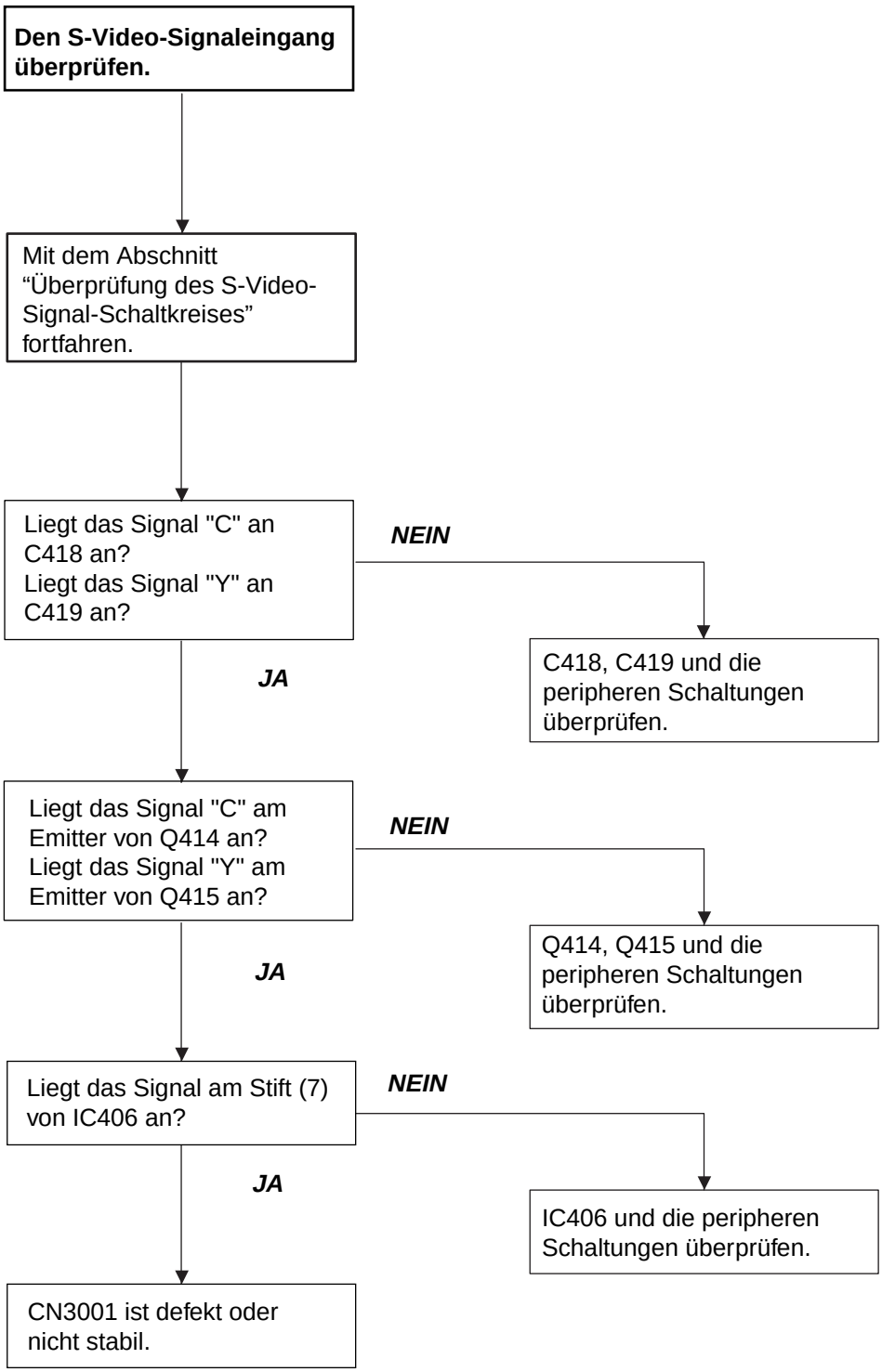
- Erkennung der Luftfilterabdeckung
  Zwischen den Stiften 1 und 2 von CN7001 kurzschließen.
  Da sich die Stromversorgung auch bei entfernter Filterabdeckung einschaltet, kann sich der Benutzer mit dem Ventilator verletzen. Nach Beendigung der Prüfung muss dies in den ursprünglichen Zustand wiederhergestellt werden.

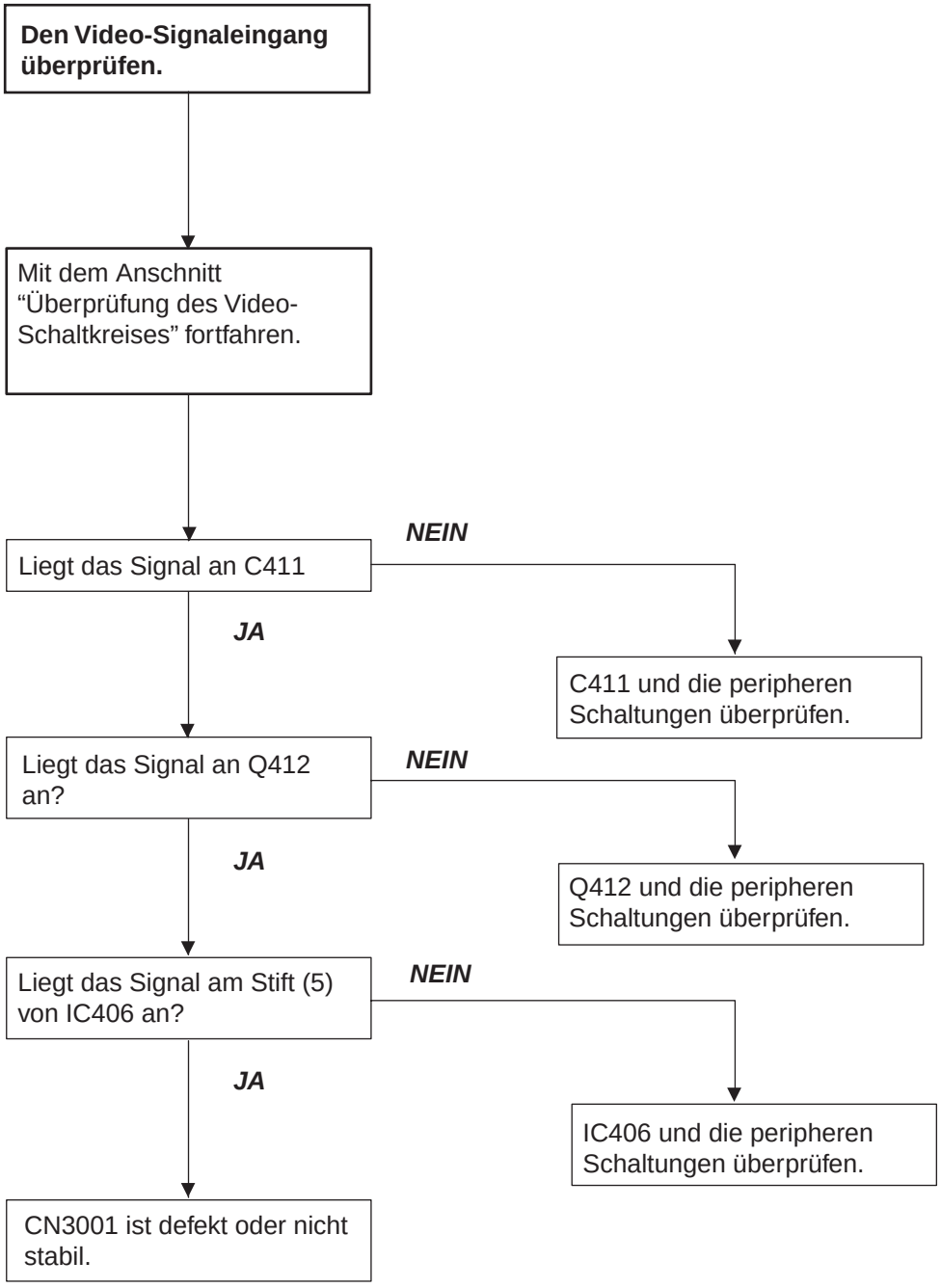
- Erkennung der Lampenkassette
  Dieses Gerät weist zwei Lampen auf. Wenn die Lampe nach dem Entfernen einer Lampenkassette eingeschaltet wird, kann das Gehäuse durch die Hitze deformiert werden. Nach Beendigung der Prüfung muss die Lampenkassette in den ursprünglichen Zustand wiederhergestellt werden.
  Zwischen den Stiften 1 und 2 von CN2801/CN2802 kurzschließen.

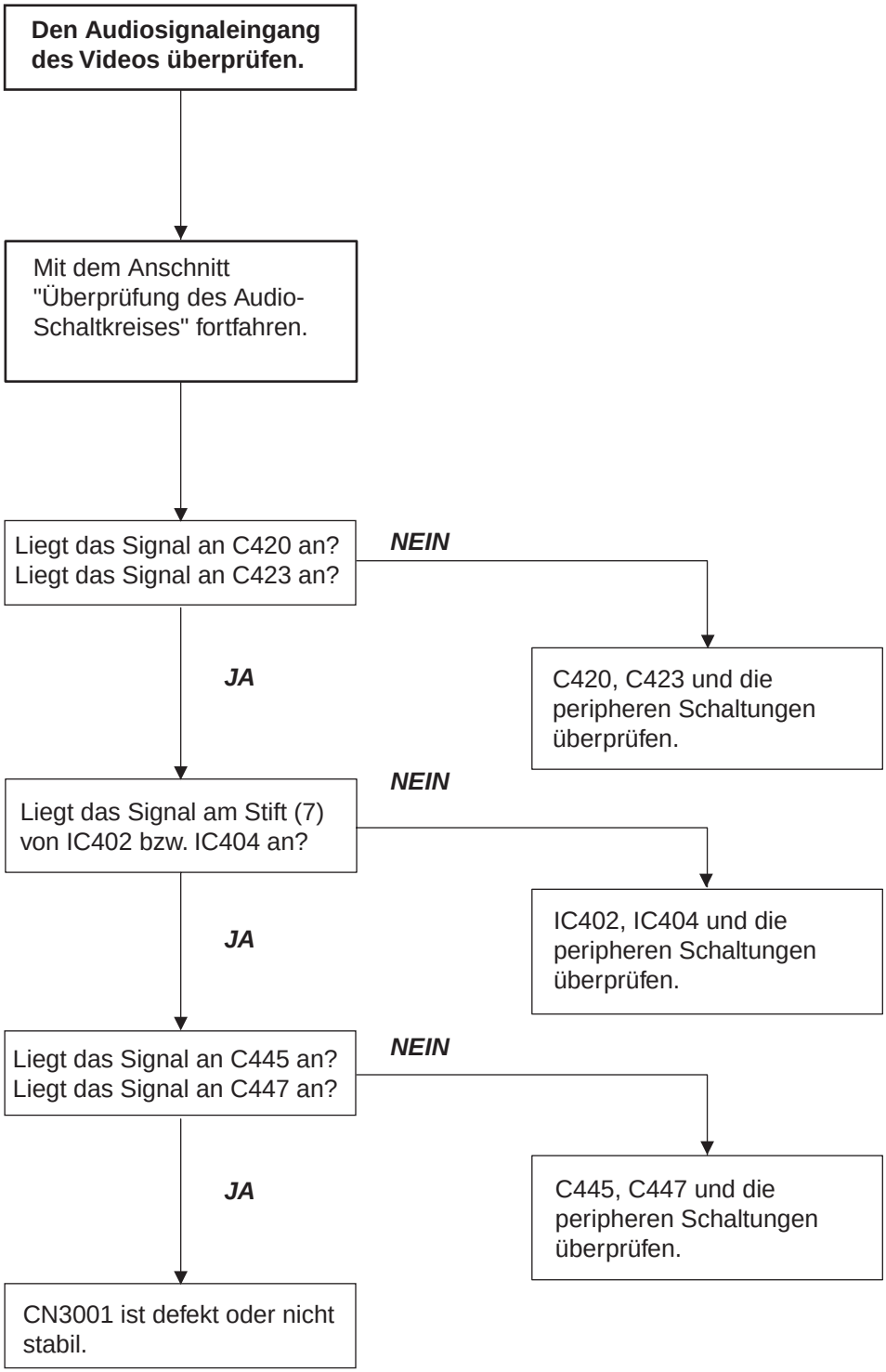
- Farbradmotor/Lichtsensor
  Kann nicht deaktiviert werden. Ein Verlängerungsstück anschließen.

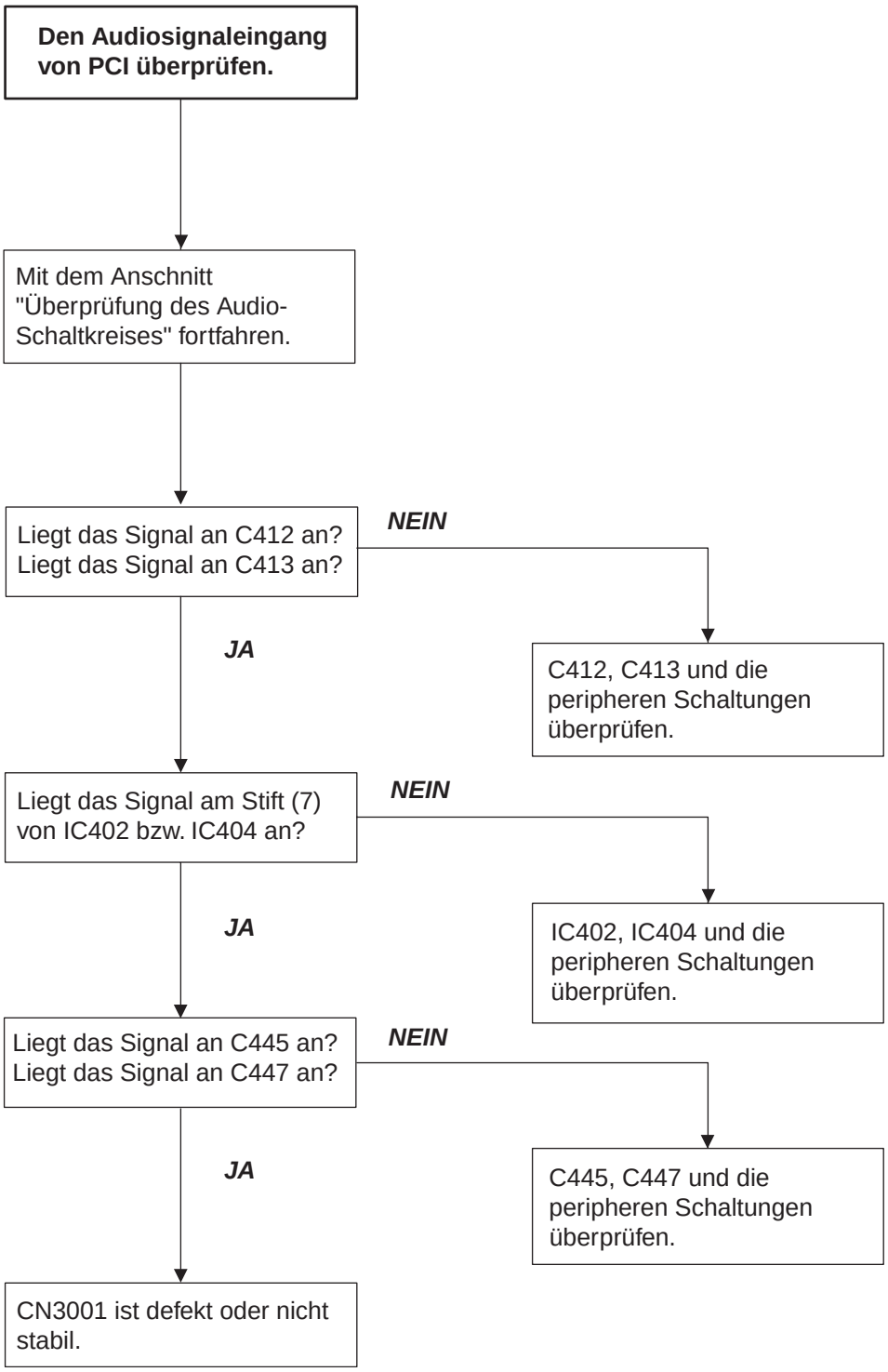
FEHLERSUCHTABELLE

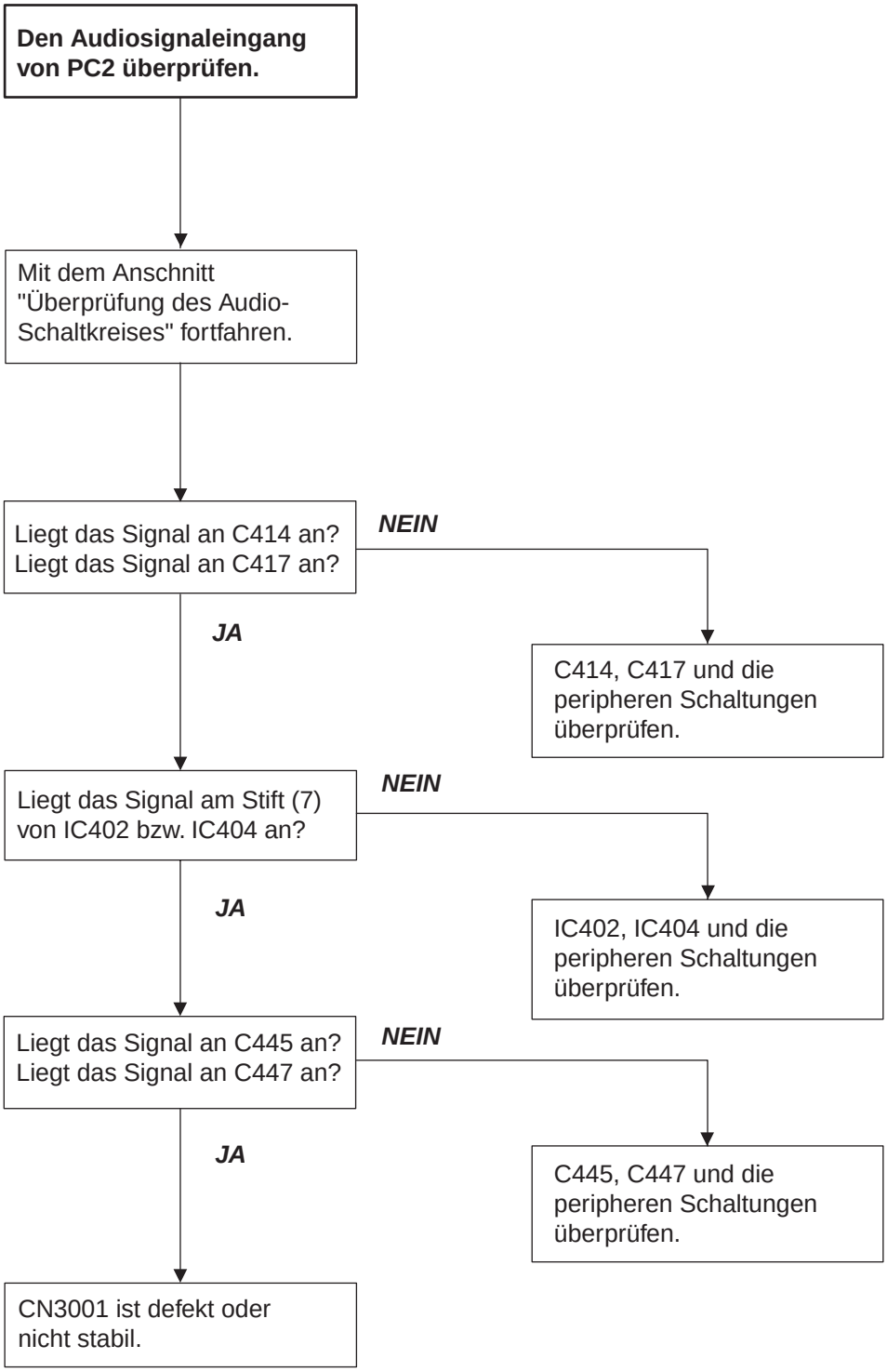


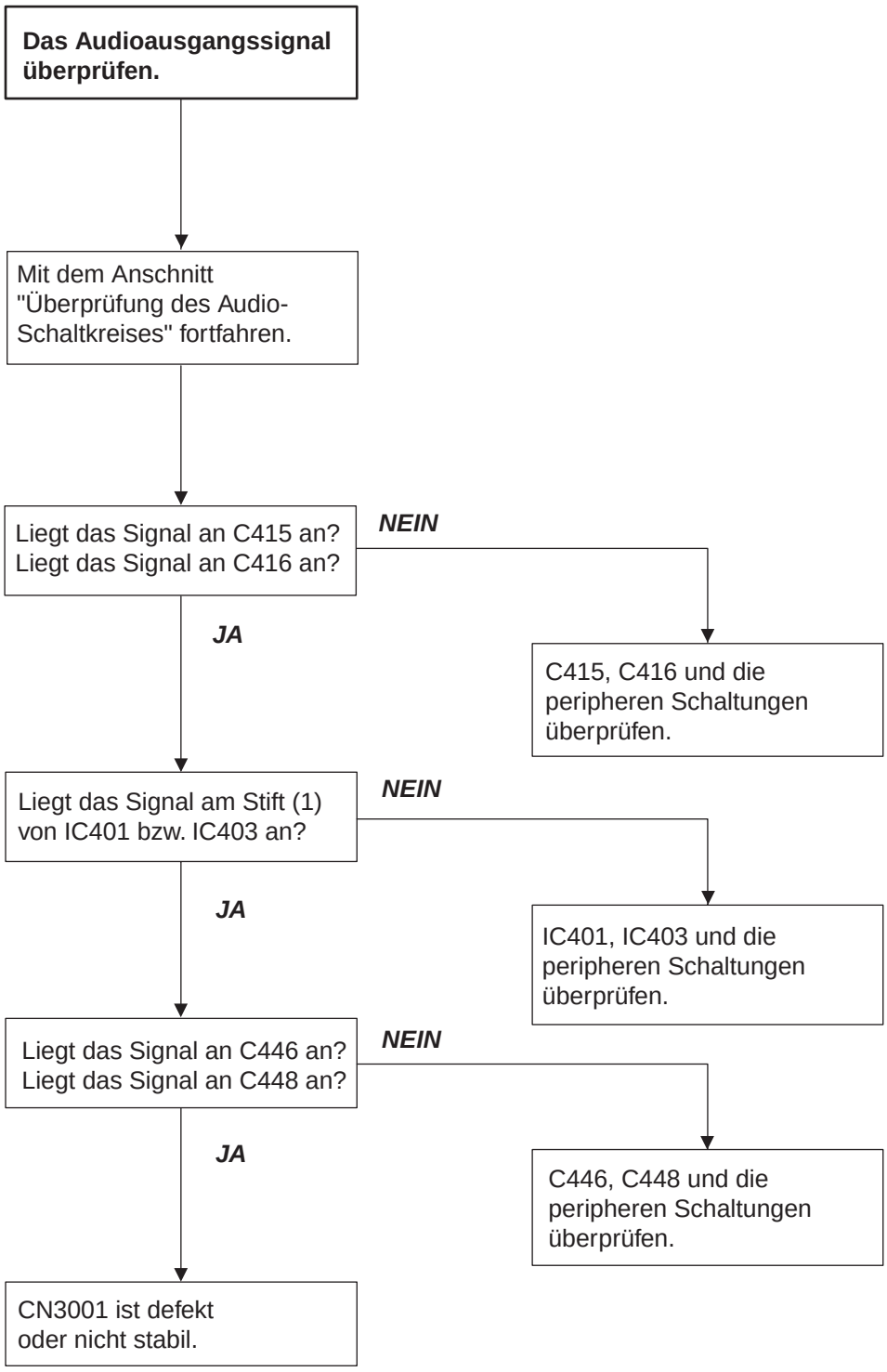

Den S-Video-Signaleingang überprüfen.
Mit dem Abschnitt “Überprüfung des S-Video-Signal-Schaltkreises” fortfahren.
Liegt das Signal "C" an C418 an?
Liegt das Signal "Y" an C419 an?
NEIN
C418, C419 und die peripheren Schaltungen überprüfen.
JA
Liegt das Signal "C" am Emitter von Q414 an?
Liegt das Signal "Y" am Emitter von Q415 an?
NEIN
Q414, Q415 und die peripheren Schaltungen überprüfen.
JA
Liegt das Signal am Stift (7) von IC406 an?
NEIN
IC406 und die peripheren Schaltungen überprüfen.
JA
CN3001 ist defekt oder nicht stabil.

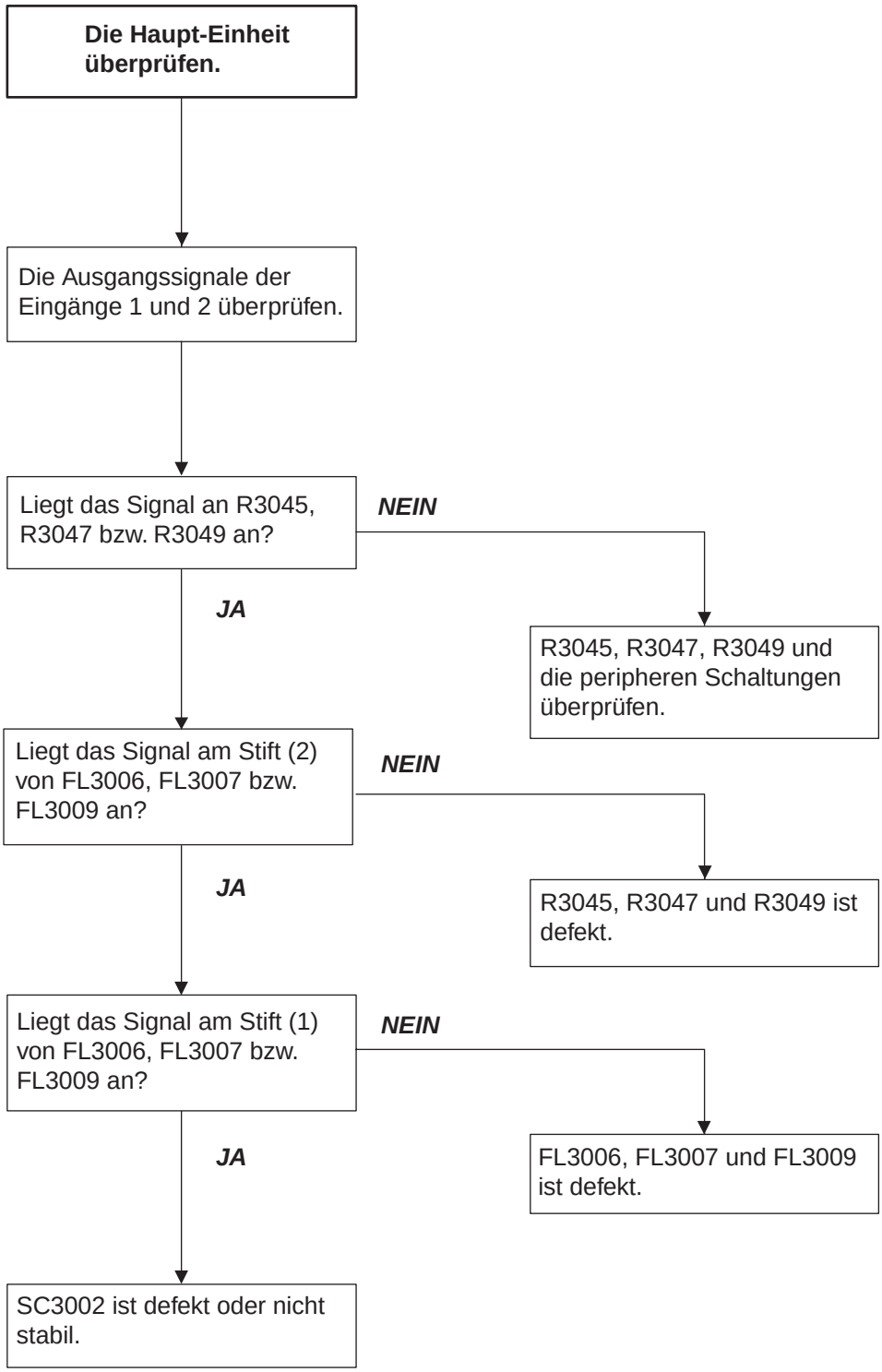

Den Video-Signaleingang überprüfen.
Mit dem Anschnitt “Überprüfung des Video-Schaltkreises” fortfahren.
Liegt das Signal an C411
NEIN
JA
C411 und die peripheren Schaltungen überprüfen.
Liegt das Signal an Q412 an?
NEIN
JA
Q412 und die peripheren Schaltungen überprüfen.
Liegt das Signal am Stift (5) von IC406 an?
NEIN
JA
IC406 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

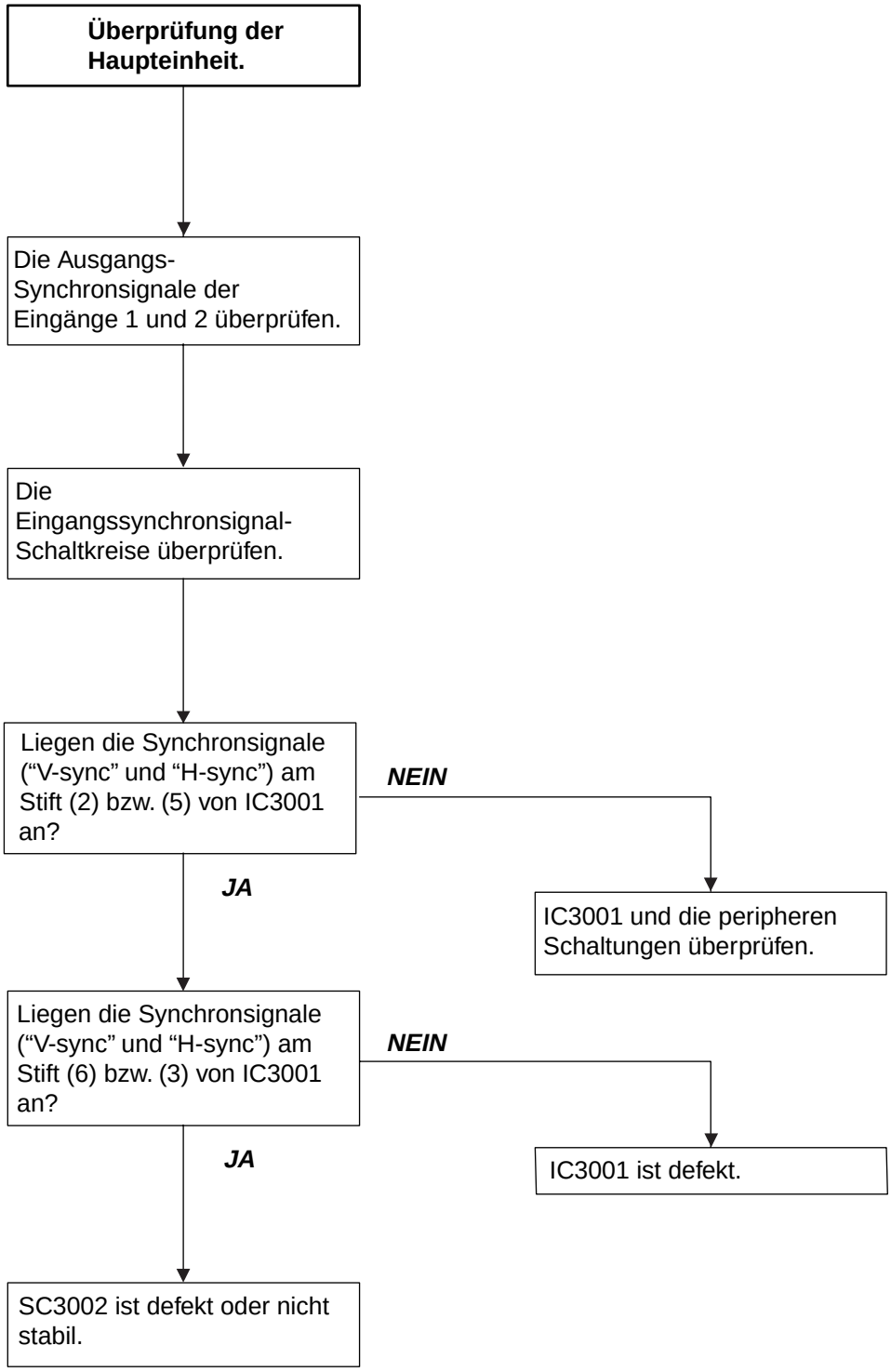

Den Audiosignaleingang des Videos überprüfen.
Mit dem Anschnitt "Überprüfung des Audio-Schaltkreises" fortfahren.
Liegt das Signal an C420 an?
Liegt das Signal an C423 an?
NEIN
JA
C420, C423 und die peripheren Schaltungen überprüfen.
Liegt das Signal am Stift (7) von IC402 bzw. IC404 an?
NEIN
JA
IC402, IC404 und die peripheren Schaltungen überprüfen.
Liegt das Signal an C445 an?
Liegt das Signal an C447 an?
NEIN
JA
C445, C447 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

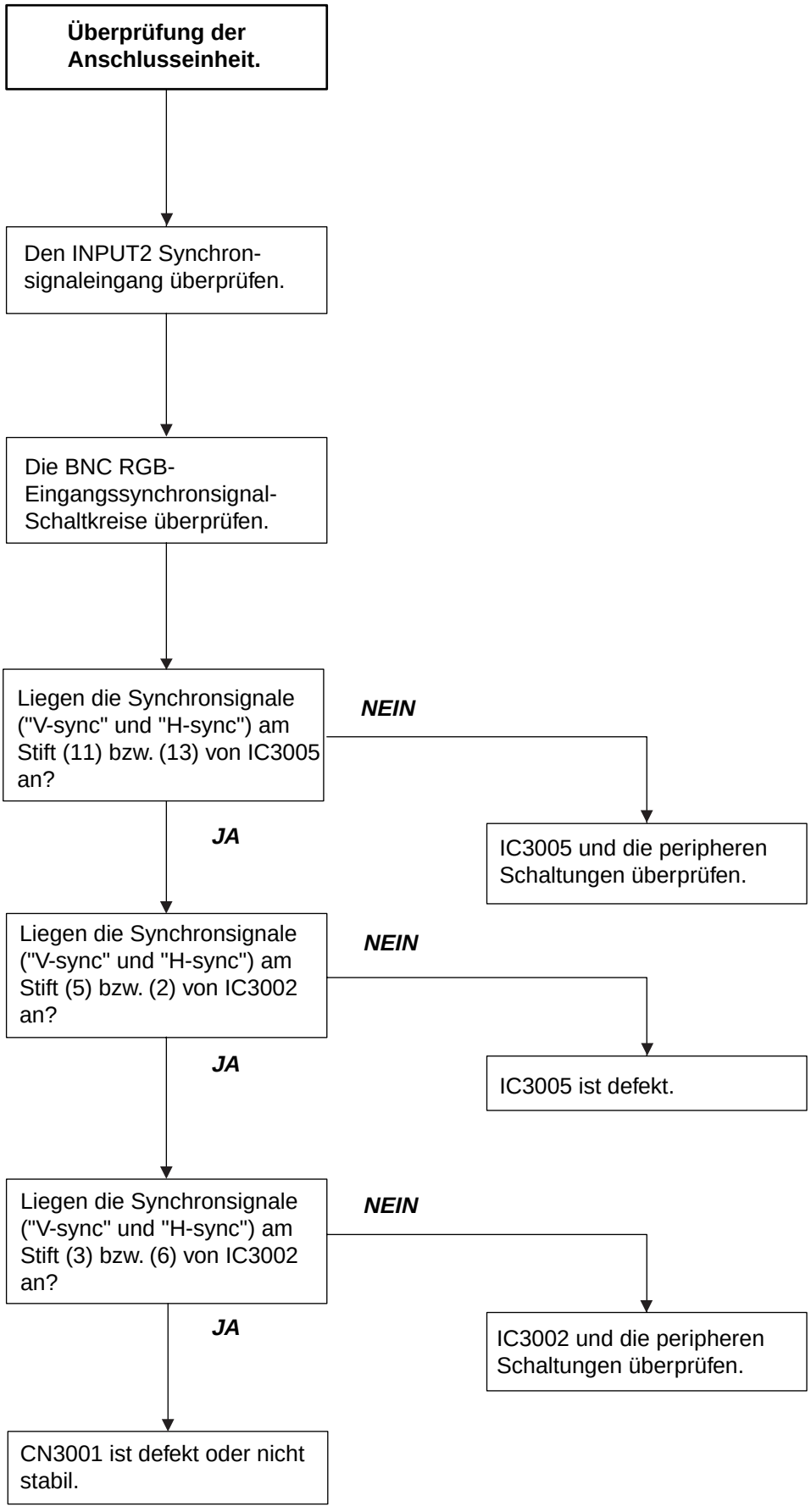

Den Audiosignaleingang von PCI überprüfen.
Mit dem Anschnitt "Überprüfung des Audio-Schaltkreises" fortfahren.
Liegt das Signal an C412 an? Liegt das Signal an C413 an?
NEIN
JA
C412, C413 und die peripheren Schaltungen überprüfen.
Liegt das Signal am Stift (7) von IC402 bzw. IC404 an?
NEIN
JA
IC402, IC404 und die peripheren Schaltungen überprüfen.
Liegt das Signal an C445 an? Liegt das Signal an C447 an?
NEIN
JA
C445, C447 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

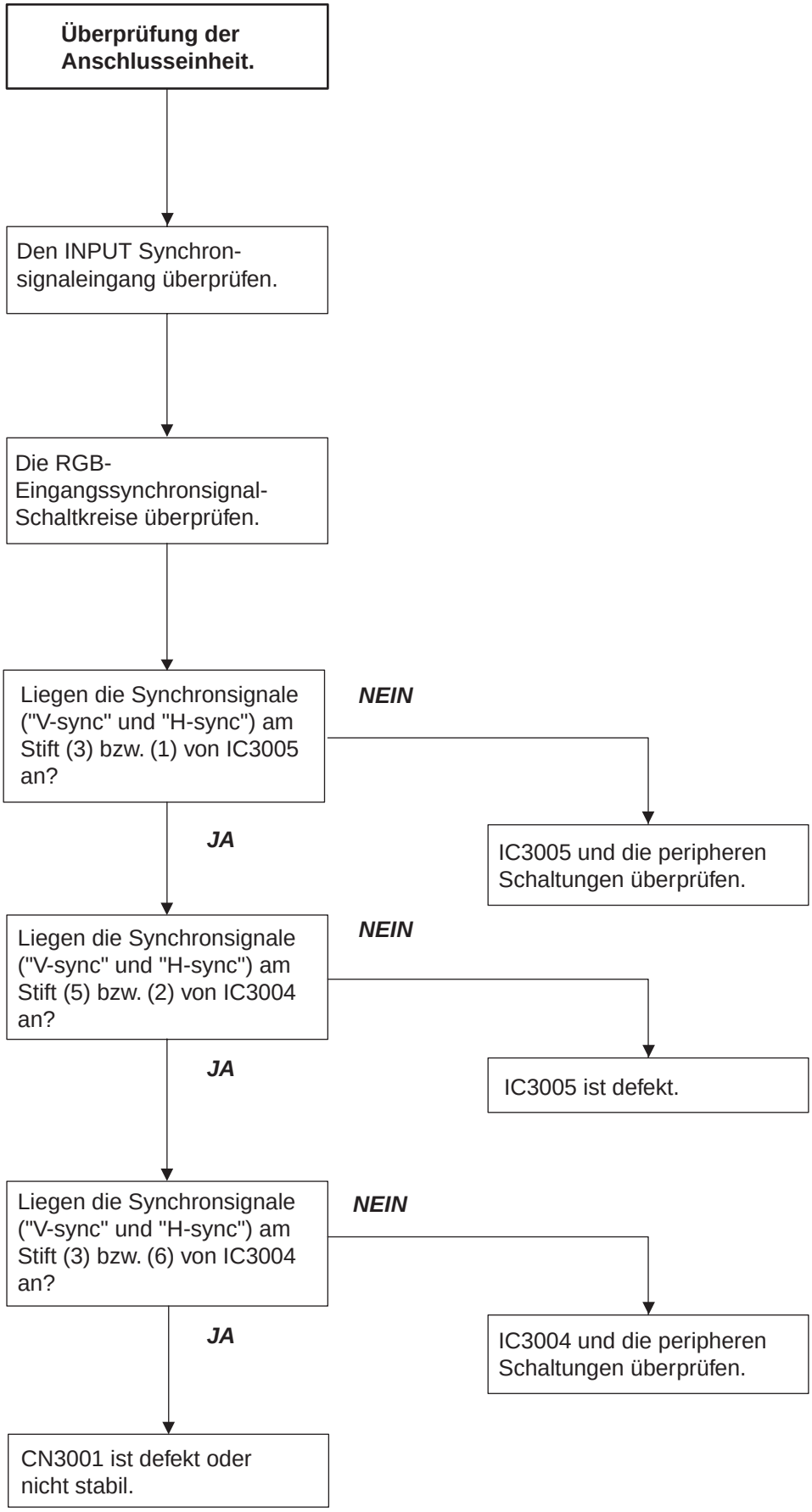

Den Audiosignaleingang von PC2 überprüfen.
Mit dem Anschnitt "Überprüfung des Audio-Schaltkreises" fortfahren.
Liegt das Signal an C414 an?
Liegt das Signal an C417 an?
NEIN
JA
C414, C417 und die peripheren Schaltungen überprüfen.
Liegt das Signal am Stift (7) von IC402 bzw. IC404 an?
NEIN
JA
IC402, IC404 und die peripheren Schaltungen überprüfen.
Liegt das Signal an C445 an?
Liegt das Signal an C447 an?
NEIN
JA
C445, C447 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

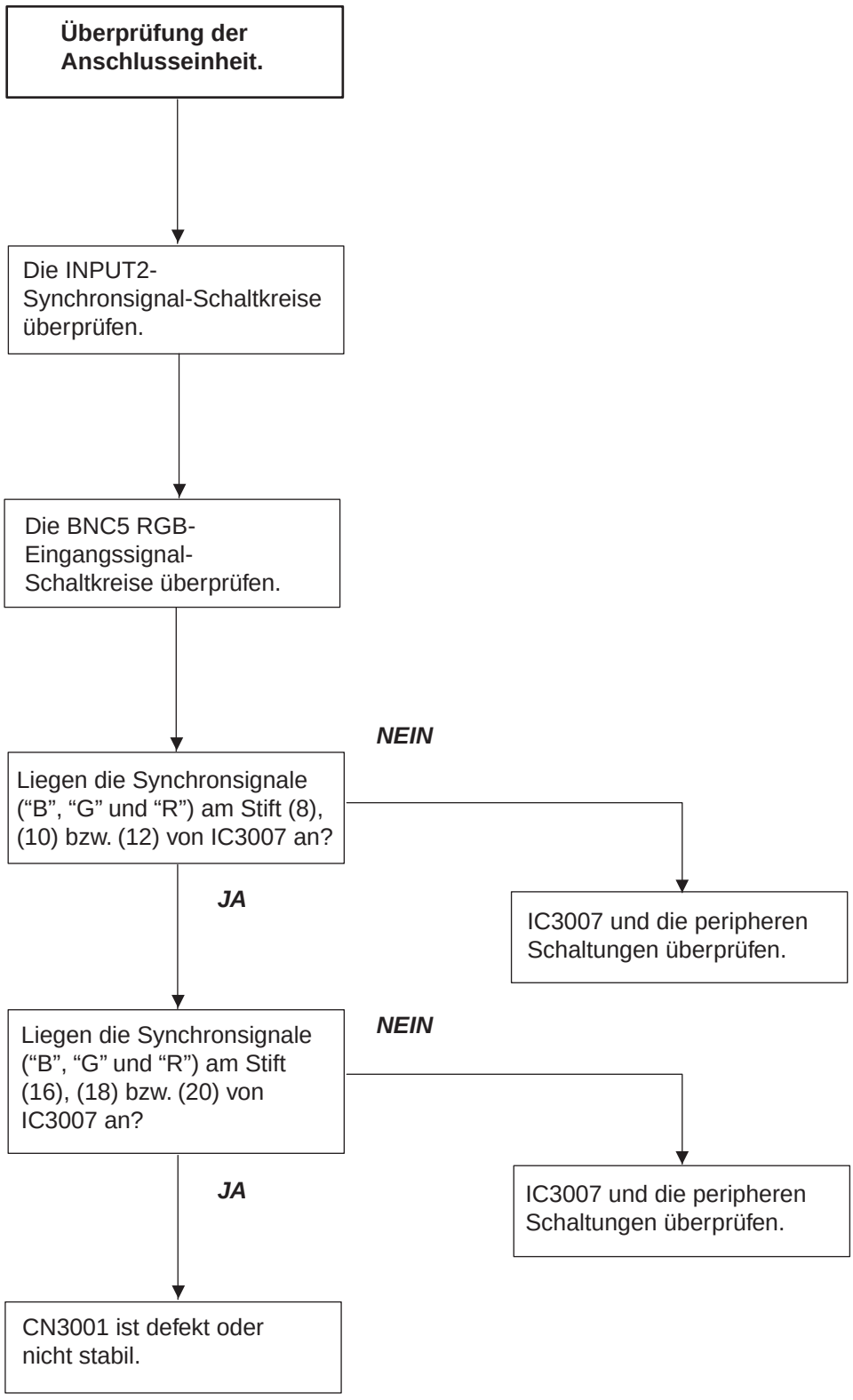

Das Audioausgangssignal überprüfen.
Mit dem Anschnitt "Überprüfung des Audio-Schaltkreises" fortfahren.
Liegt das Signal an C415 an? Liegt das Signal an C416 an?
NEIN
JA
C415, C416 und die peripheren Schaltungen überprüfen.
Liegt das Signal am Stift (1) von IC401 bzw. IC403 an?
NEIN
JA
IC401, IC403 und die peripheren Schaltungen überprüfen.
Liegt das Signal an C446 an? Liegt das Signal an C448 an?
NEIN
JA
C446, C448 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

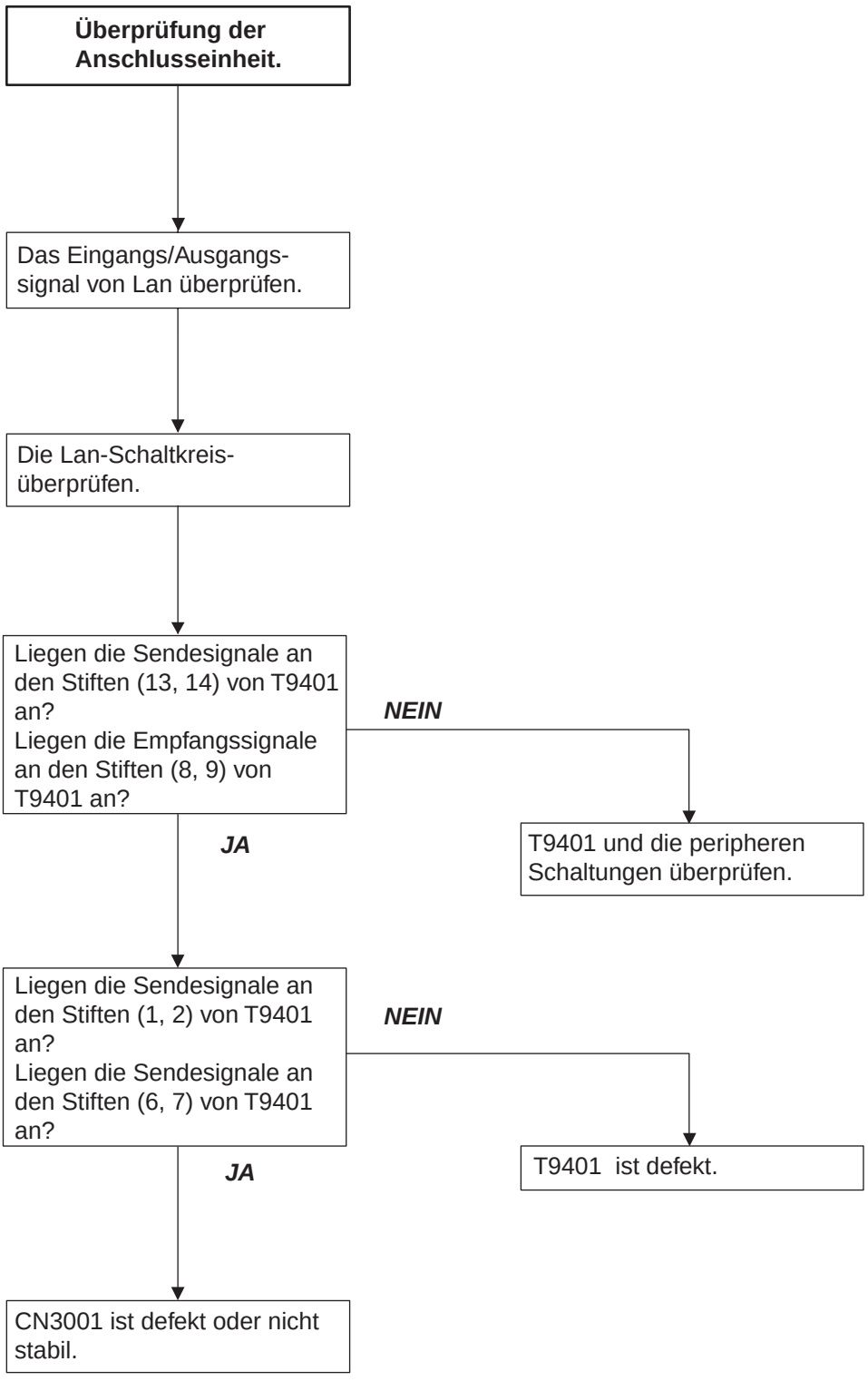

Die Haupt-Einheit überprüfen.
Die Ausgangssignale der Eingänge 1 und 2 überprüfen.
Liegt das Signal an R3045, R3047 bzw. R3049 an?
NEIN
JA
R3045, R3047, R3049 und die peripheren Schaltungen überprüfen.
Liegt das Signal am Stift (2) von FL3006, FL3007 bzw. FL3009 an?
NEIN
JA
R3045, R3047 und R3049 ist defekt.
Liegt das Signal am Stift (1) von FL3006, FL3007 bzw. FL3009 an?
NEIN
JA
FL3006, FL3007 und FL3009 ist defekt.
SC3002 ist defekt oder nicht stabil.

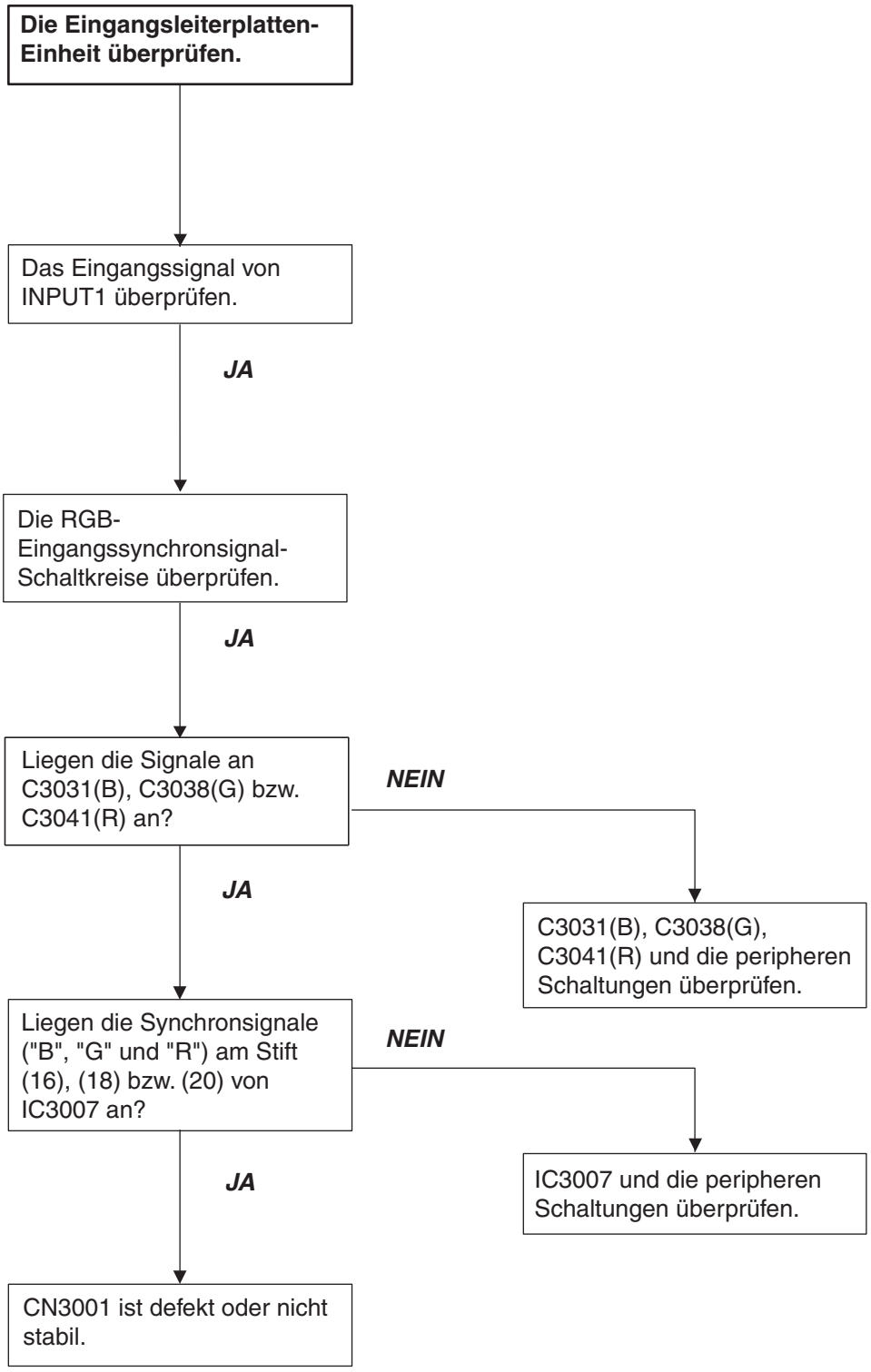

Überprüfung der Haupteinheit.
Die Ausgangs-Synchronsignale der Eingänge 1 und 2 überprüfen.
Die Eingangssynchronsignal-Schaltkreise überprüfen.
Liegen die Synchronsignale (“V-sync” und “H-sync”) am Stift (2) bzw. (5) von IC3001 an?
NEIN
JA
IC3001 und die peripheren Schaltungen überprüfen.
Liegen die Synchronsignale (“V-sync” und “H-sync”) am Stift (6) bzw. (3) von IC3001 an?
NEIN
JA
IC3001 ist defekt.
SC3002 ist defekt oder nicht stabil.

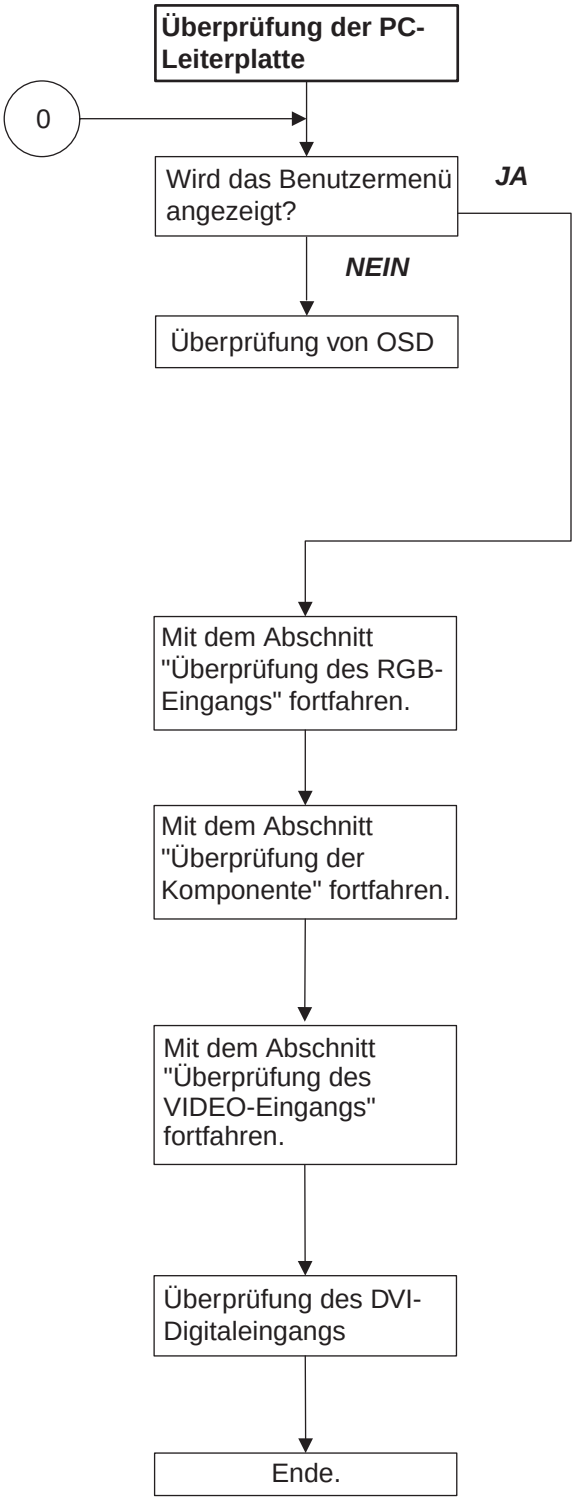

Überprüfung der Anschlusseinheit.
Den INPUT2 Synchron-signaleingang überprüfen.
Die BNC RGB-Eingangssynchronsignal-Schaltkreise überprüfen.
Liegen die Synchronsignale ("V-sync" und "H-sync") am Stift (11) bzw. (13) von IC3005 an?
NEIN
JA
IC3005 und die peripheren Schaltungen überprüfen.
Liegen die Synchronsignale ("V-sync" und "H-sync") am Stift (5) bzw. (2) von IC3002 an?
NEIN
JA
IC3005 ist defekt.
Liegen die Synchronsignale ("V-sync" und "H-sync") am Stift (3) bzw. (6) von IC3002 an?
NEIN
JA
IC3002 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

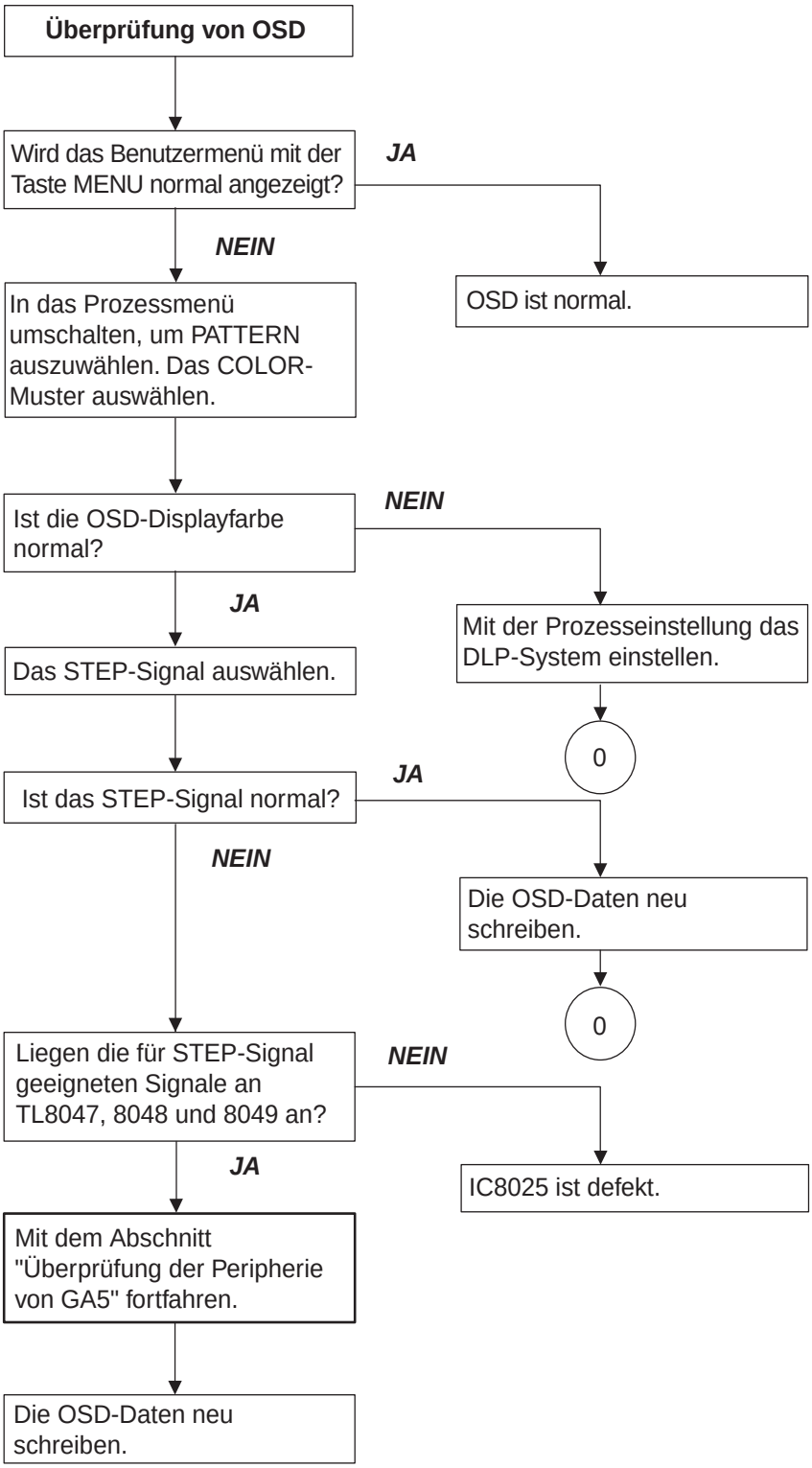

Überprüfung der Anschlusseinheit.
Den INPUT Synchron-signaleingang überprüfen.
Die RGB-Eingangssynchronsignal-Schaltkreise überprüfen.
Liegen die Synchronsignale ("V-sync" und "H-sync") am Stift (3) bzw. (1) von IC3005 an?
NEIN
JA
IC3005 und die peripheren Schaltungen überprüfen.
Liegen die Synchronsignale ("V-sync" und "H-sync") am Stift (5) bzw. (2) von IC3004 an?
NEIN
JA
IC3005 ist defekt.
Liegen die Synchronsignale ("V-sync" und "H-sync") am Stift (3) bzw. (6) von IC3004 an?
NEIN
JA
IC3004 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

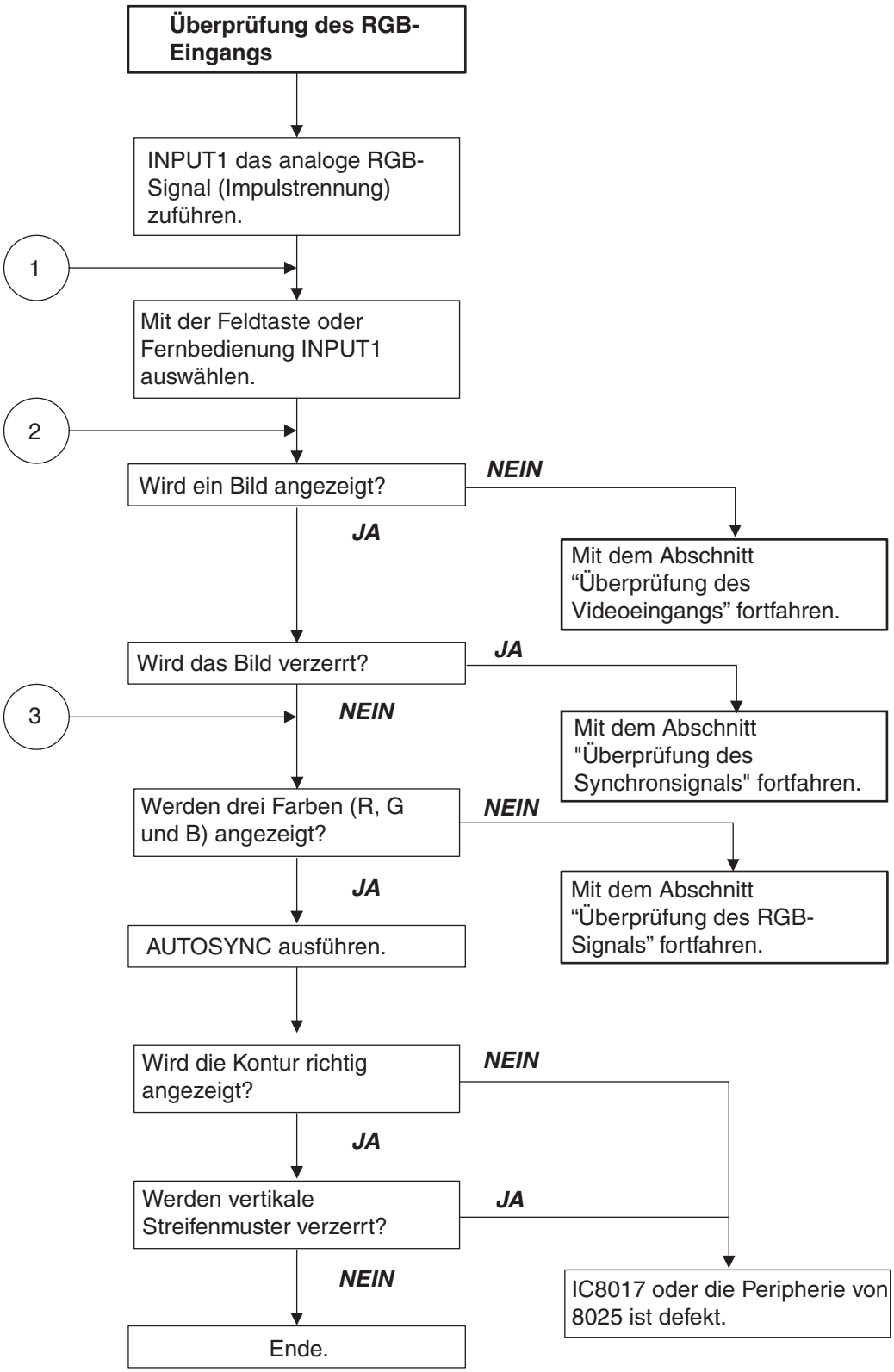

Überprüfung der Anschlusseinheit.
Die INPUT2-Synchronsignal-Schaltkreise überprüfen.
Die BNC5 RGB-Eingangssignal-Schaltkreise überprüfen.
Liegen die Synchronsignale (“B”, “G” und “R”) am Stift (8), (10) bzw. (12) von IC3007 an?
NEIN
JA
IC3007 und die peripheren Schaltungen überprüfen.
Liegen die Synchronsignale (“B”, “G” und “R”) am Stift (16), (18) bzw. (20) von IC3007 an?
NEIN
JA
IC3007 und die peripheren Schaltungen überprüfen.
CN3001 ist defekt oder nicht stabil.

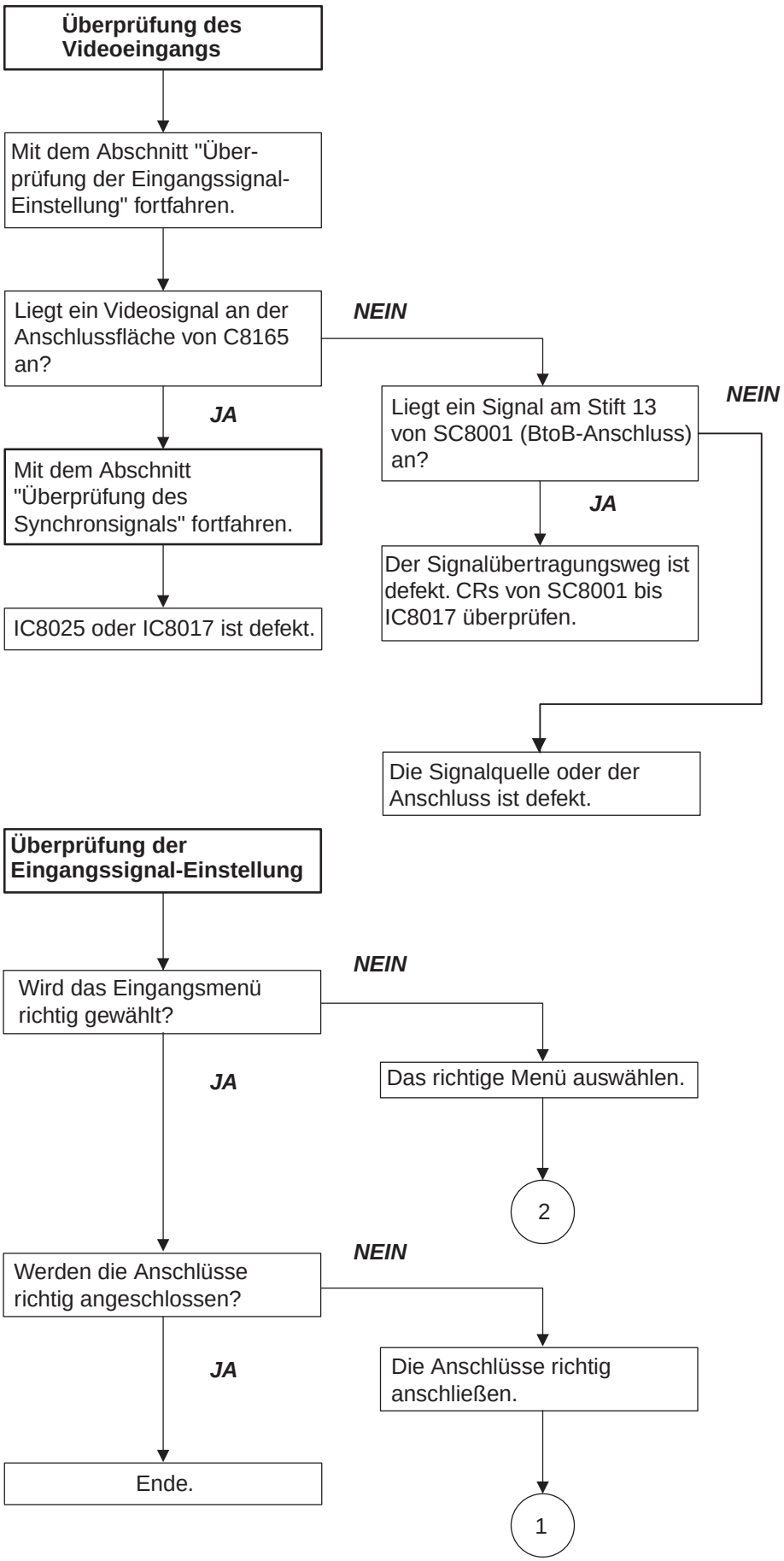

Überprüfung der Anschlusseinheit.
Das Eingangs/Ausgangs-signal von Lan überprüfen.
Die Lan-Schaltkreis-überprüfen.
Liegen die Sendesignale an den Stiften (13, 14) von T9401 an?
Liegen die Empfangssignale an den Stiften (8, 9) von T9401 an?
NEIN
JA
T9401 und die peripheren Schaltungen überprüfen.
Liegen die Sendesignale an den Stiften (1, 2) von T9401 an?
Liegen die Sendesignale an den Stiften (6, 7) von T9401 an?
NEIN
JA
T9401 ist defekt.
CN3001 ist defekt oder nicht stabil.

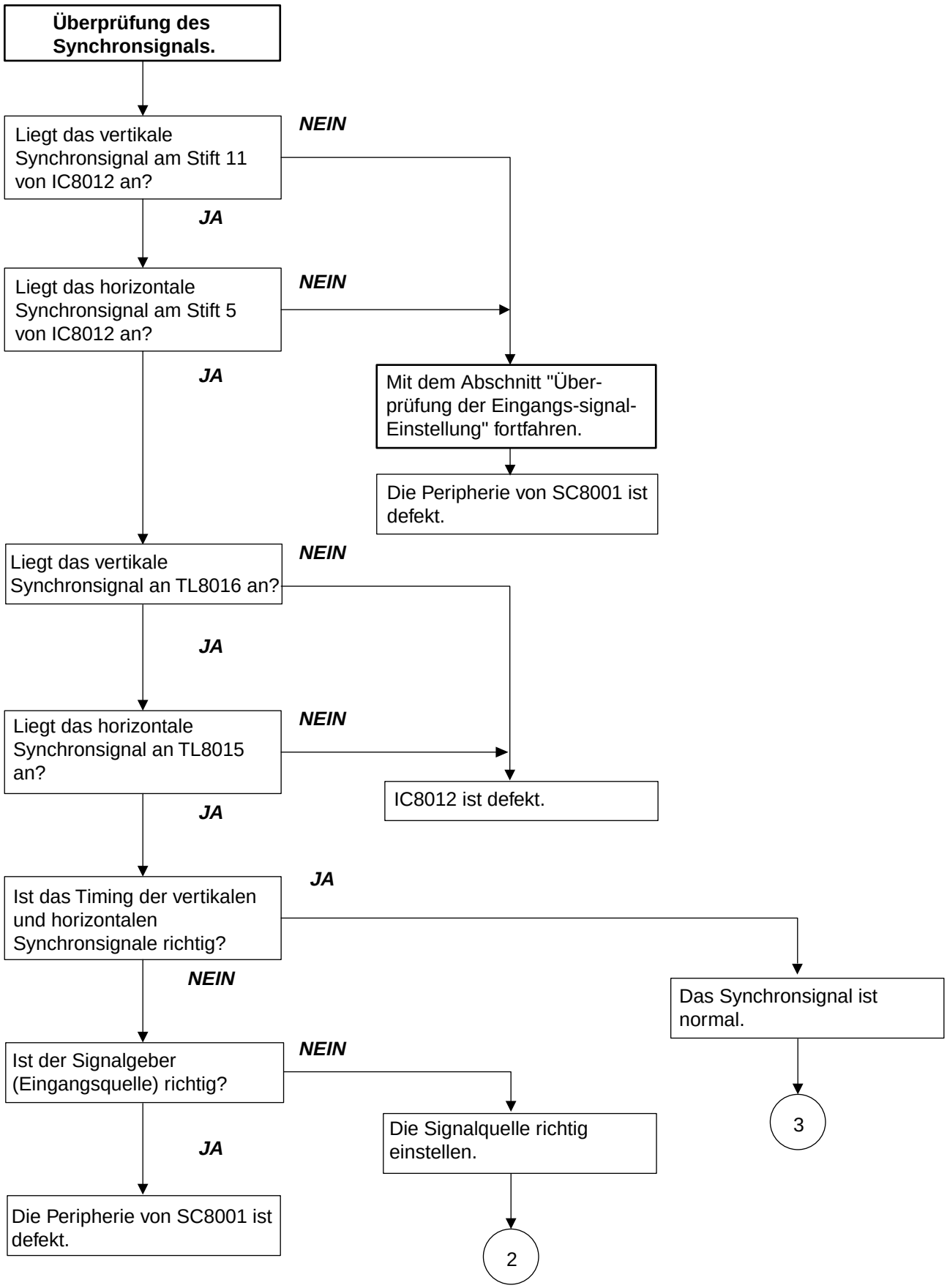

Die Eingangsleiterplatten-Einheit überprüfen.
Das Eingangssignal von INPUT1 überprüfen.
JA
Die RGB-Eingangssynchronsignal-Schaltkreise überprüfen.
JA
Liegen die Signale an C3031(B), C3038(G) bzw. C3041(R) an?
NEIN
C3031(B), C3038(G), C3041(R) und die peripheren Schaltungen überprüfen.
JA
Liegen die Synchronsignale ("B", "G" und "R") am Stift (16), (18) bzw. (20) von IC3007 an?
NEIN
IC3007 und die peripheren Schaltungen überprüfen.
JA
CN3001 ist defekt oder nicht stabil.

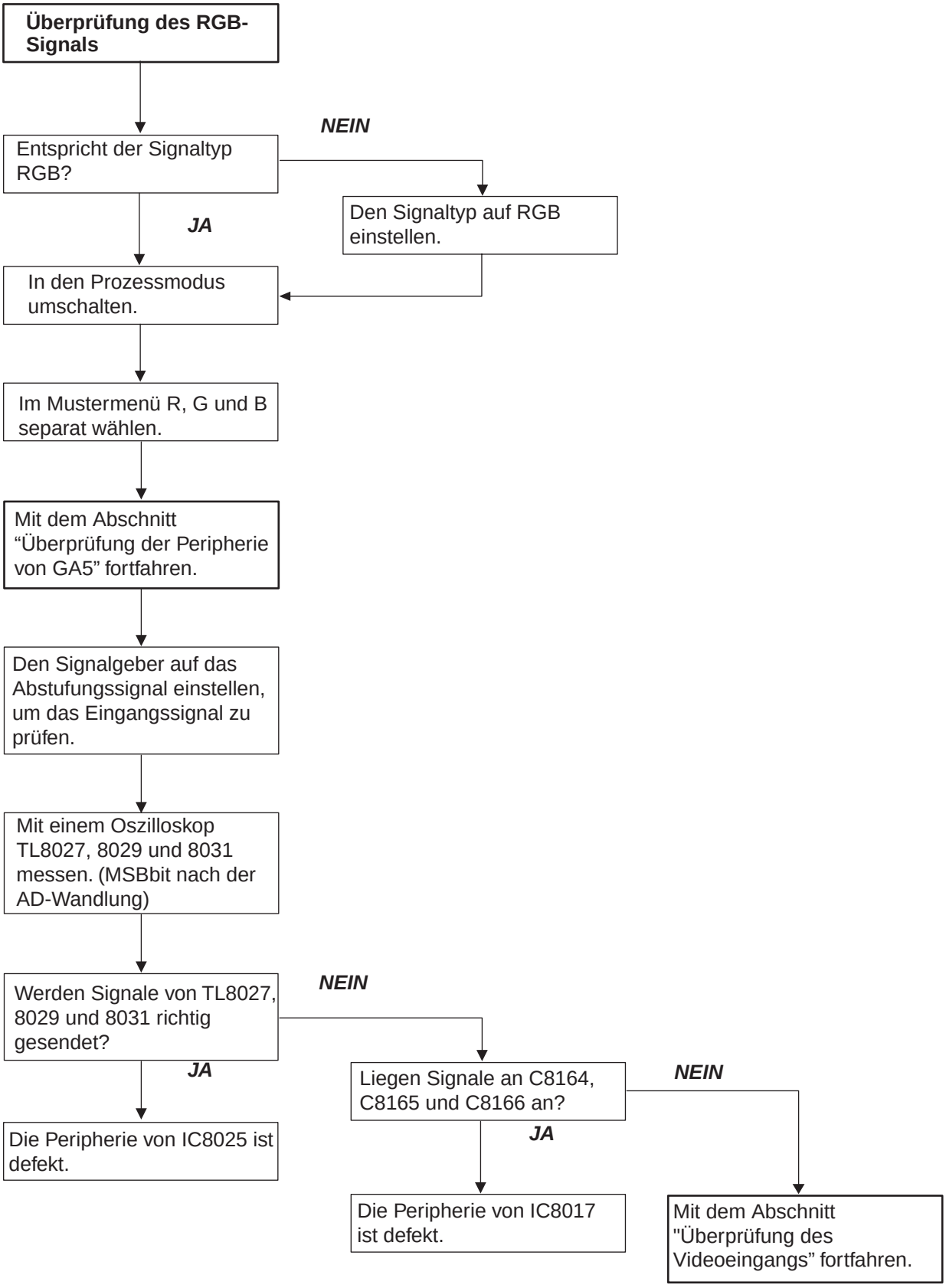

Überprüfung der PC-Leiterplatte
0
Wird das Benutzermenü angezeigt?
JA
NEIN
Überprüfung von OSD
Mit dem Abschnitt "Überprüfung des RGB-Eingangs" fortfahren.
Mit dem Abschnitt "Überprüfung der Komponente" fortfahren.
Mit dem Abschnitt "Überprüfung des VIDEO-Eingangs" fortfahren.
Überprüfung des DVI-Digitaleingangs
Ende.

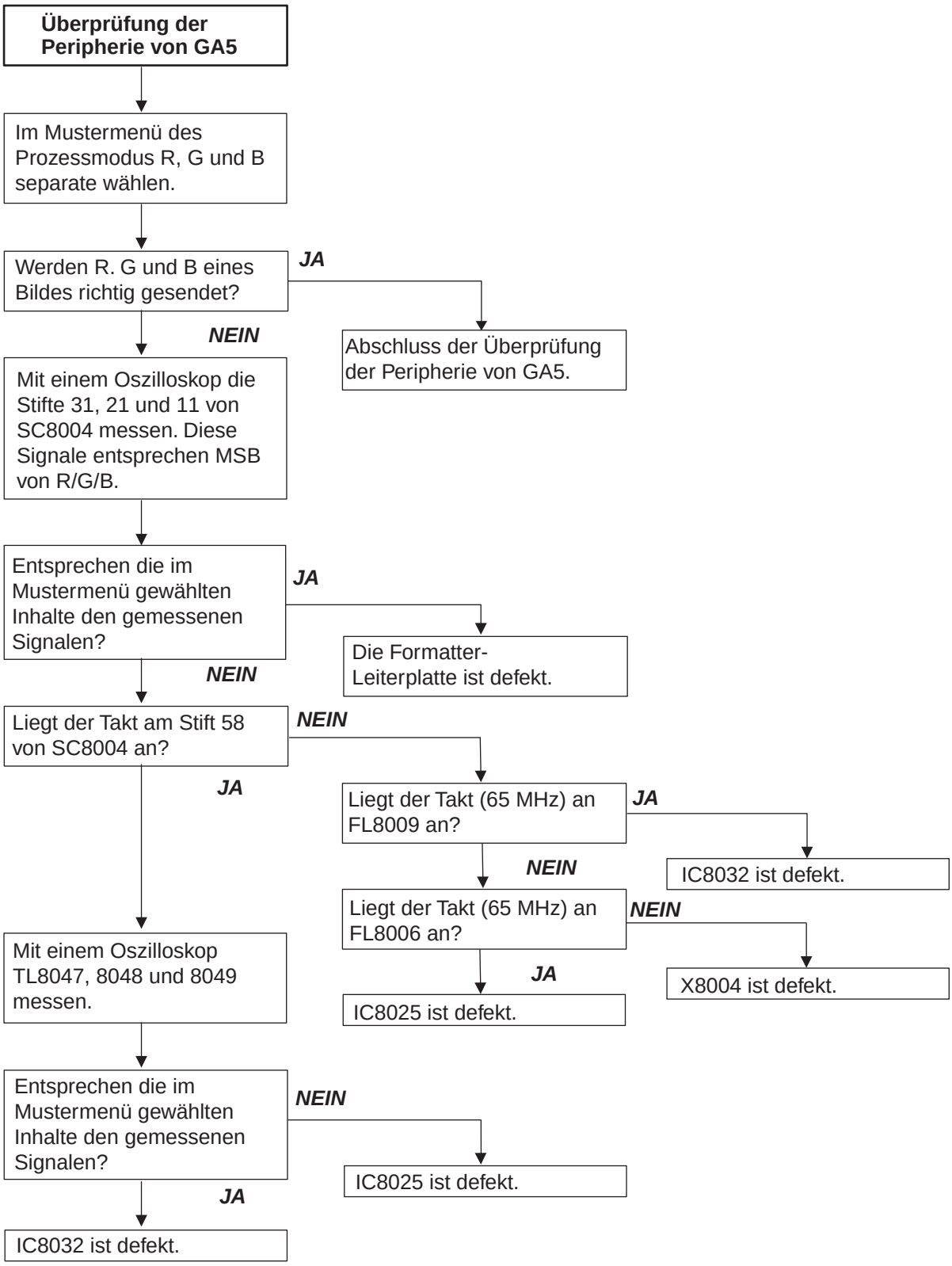

Überprüfung von OSD
Wird das Benutzermenü mit der Taste MENU normal angezeigt?
JA
NEIN
OSD ist normal.
In das Prozessmenü umschalten, um PATTERN auszuwählen. Das COLOR-Muster auswählen.
Ist die OSD-Displayfarbe normal?
NEIN
JA
Mit der Prozesseinstellung das DLP-System einstellen.
Das STEP-Signal auswählen.
0
Ist das STEP-Signal normal?
JA
NEIN
Die OSD-Daten neu schreiben.
0
Liegen die für STEP-Signal geeigneten Signale an TL8047, 8048 und 8049 an?
NEIN
JA
IC8025 ist defekt.
Mit dem Abschnitt "Überprüfung der Peripherie von GA5" fortfahren.
Die OSD-Daten neu schreiben.

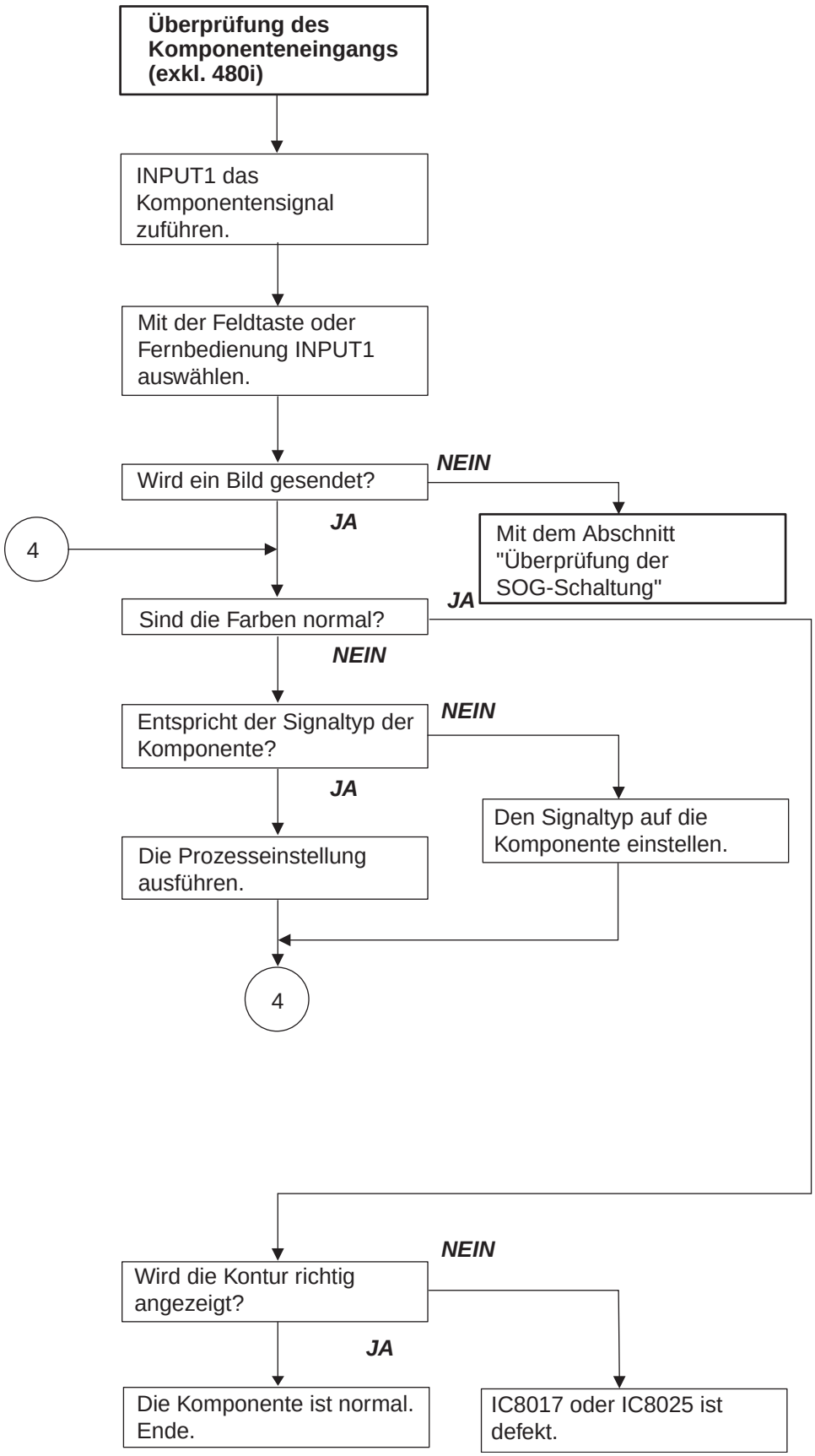

Überprüfung des RGB-Eingangs
INPUT1 das analoge RGB-Signal (Impulstrennung) zuführen.
1
Mit der Feldtaste oder Fernbedienung INPUT1 auswählen.
2
Wird ein Bild angezeigt?
NEIN
JA
Mit dem Abschnitt “Überprüfung des Videoeingangs” fortfahren.
Wird das Bild verzerrt?
JA
3
NEIN
Mit dem Abschnitt "Überprüfung des Synchronsignals" fortfahren.
Werden drei Farben (R, G und B) angezeigt?
NEIN
JA
Mit dem Abschnitt “Überprüfung des RGB-Signals” fortfahren.
AUTOSYNC ausführen.
Wird die Kontur richtig angezeigt?
NEIN
JA
Werden vertikale Streifenmuster verzerrt?
JA
NEIN
IC8017 oder die Peripherie von 8025 ist defekt.
Ende.

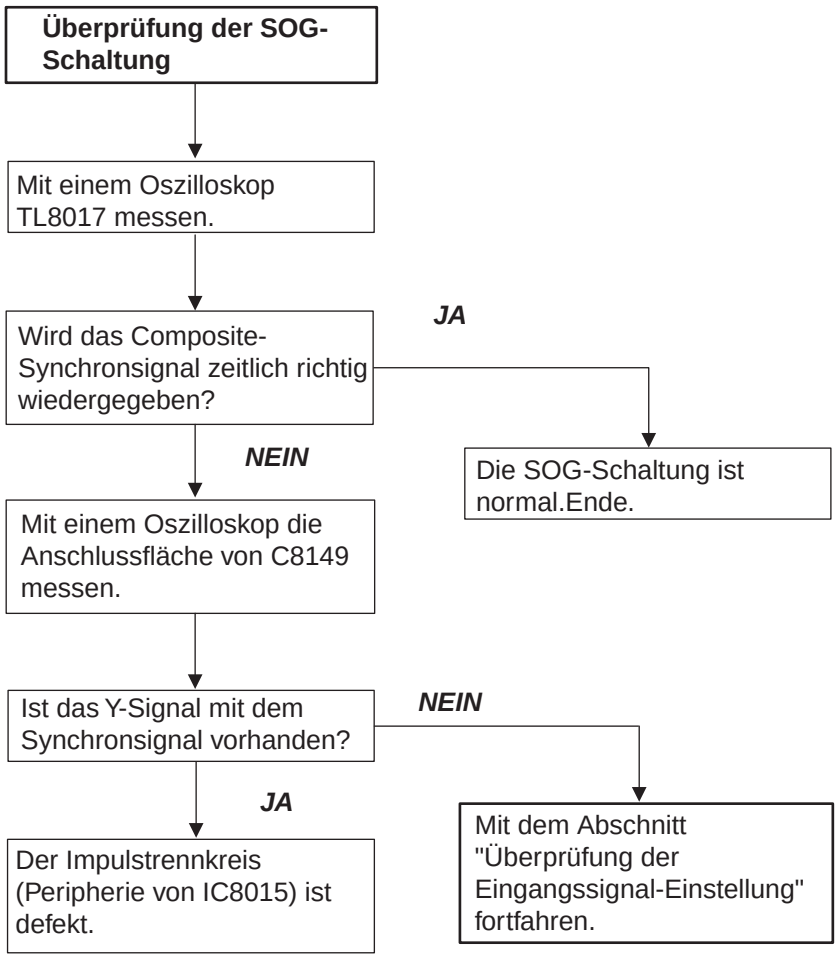

Überprüfung des Videoeingangs
Mit dem Abschnitt "Überprüfung der Eingangssignal-Einstellung" fortfahren.
Liegt ein Videosignal an der Anschlussfläche von C8165 an?
NEIN
JA
Liegt ein Signal am Stift 13 von SC8001 (BtoB-Anschluss) an?
NEIN
JA
Mit dem Abschnitt "Überprüfung des Synchronsignals" fortfahren.
Der Signalübertragungsweg ist defekt. CRs von SC8001 bis IC8017 überprüfen.
IC8025 oder IC8017 ist defekt.
Die Signalquelle oder der Anschluss ist defekt.
Überprüfung der Eingangssignal-Einstellung
Wird das Eingangsmenü richtig gewählt?
NEIN
JA
Das richtige Menü auswählen.
2
Werden die Anschlüsse richtig angeschlossen?
NEIN
JA
Die Anschlüsse richtig anschließen.
Ende.
1

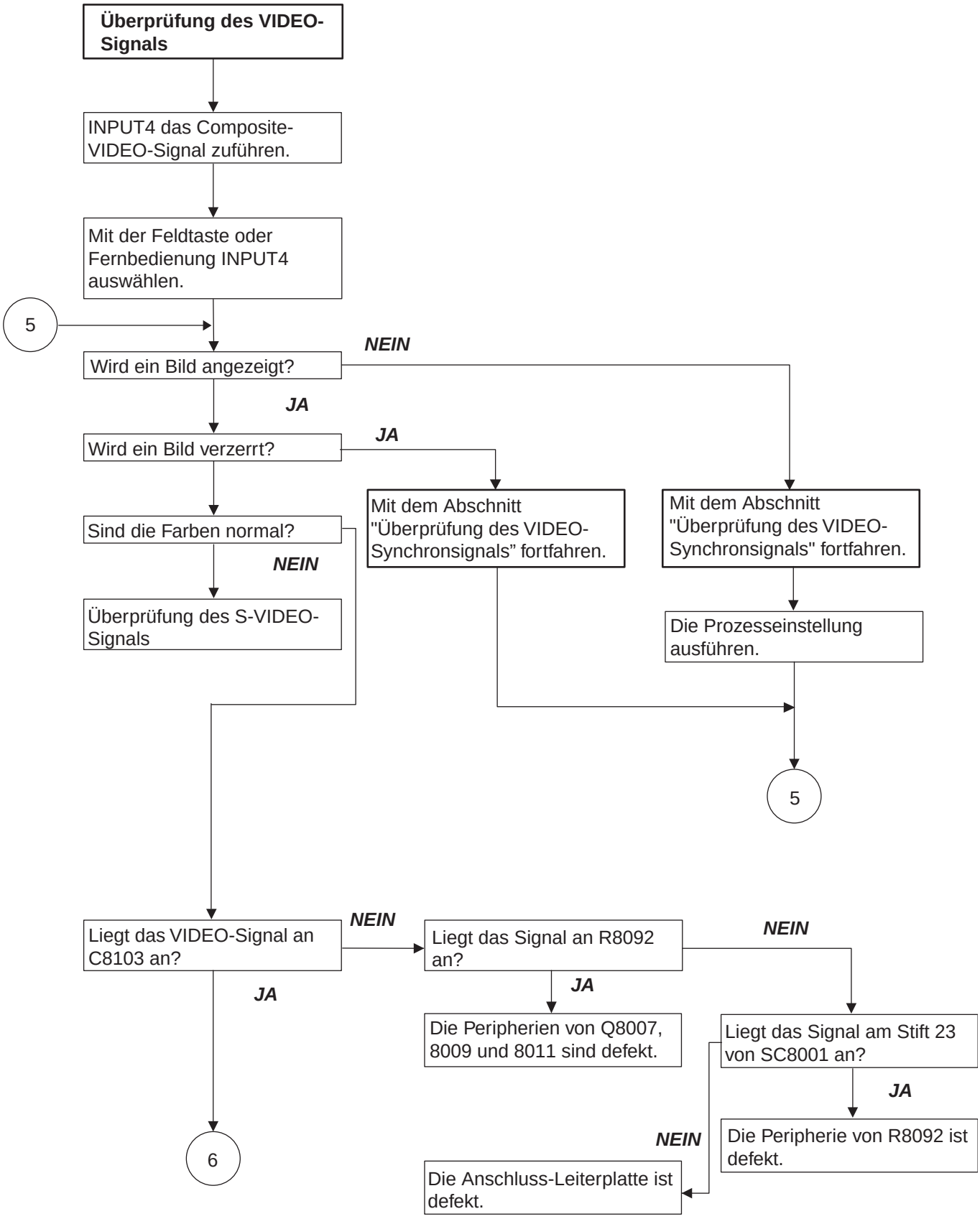

Überprüfung des Synchronsignals.
Liegt das vertikale Synchronsignal am Stift 11 von IC8012 an?
NEIN
JA
Liegt das horizontale Synchronsignal am Stift 5 von IC8012 an?
NEIN
JA
Mit dem Abschnitt "Über-prüfung der Eingangs-signal-Einstellung" fortfahren.
Die Peripherie von SC8001 ist defekt.
Liegt das vertikale Synchronsignal an TL8016 an?
NEIN
JA
Liegt das horizontale Synchronsignal an TL8015 an?
NEIN
JA
IC8012 ist defekt.
Ist das Timing der vertikalen und horizontalen Synchronsignale richtig?
JA
NEIN
Das Synchronsignal ist normal.
3
Ist der Signalgeber (Eingangsquelle) richtig?
NEIN
JA
Die Signalquelle richtig einstellen.
2
Die Peripherie von SC8001 ist defekt.

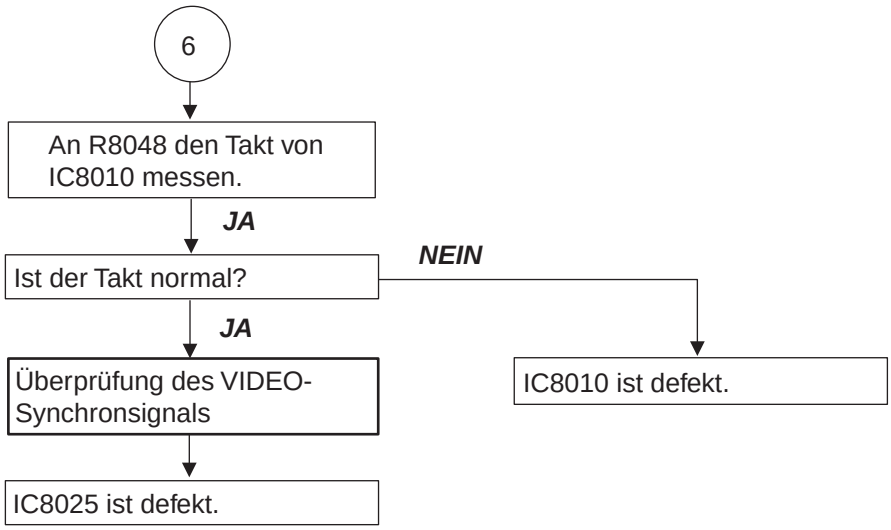

Überprüfung des RGB-Signals
Entspricht der Signaltyp RGB?
NEIN
JA
Den Signaltyp auf RGB einstellen.
In den Prozessmodus umschalten.
Im Mustermenü R, G und B separat wählen.
Mit dem Abschnitt “Überprüfung der Peripherie von GA5” fortfahren.
Den Signalgeber auf das Abstufungssignal einstellen, um das Eingangssignal zu prüfen.
Mit einem Oszilloskop TL8027, 8029 und 8031 messen. (MSBbit nach der AD-Wandlung)
Werden Signale von TL8027, 8029 und 8031 richtig gesendet?
NEIN
JA
Liegen Signale an C8164, C8165 und C8166 an?
NEIN
JA
Die Peripherie von IC8025 ist defekt.
Die Peripherie von IC8017 ist defekt.
Mit dem Abschnitt "Überprüfung des Videoeingangs” fortfahren.

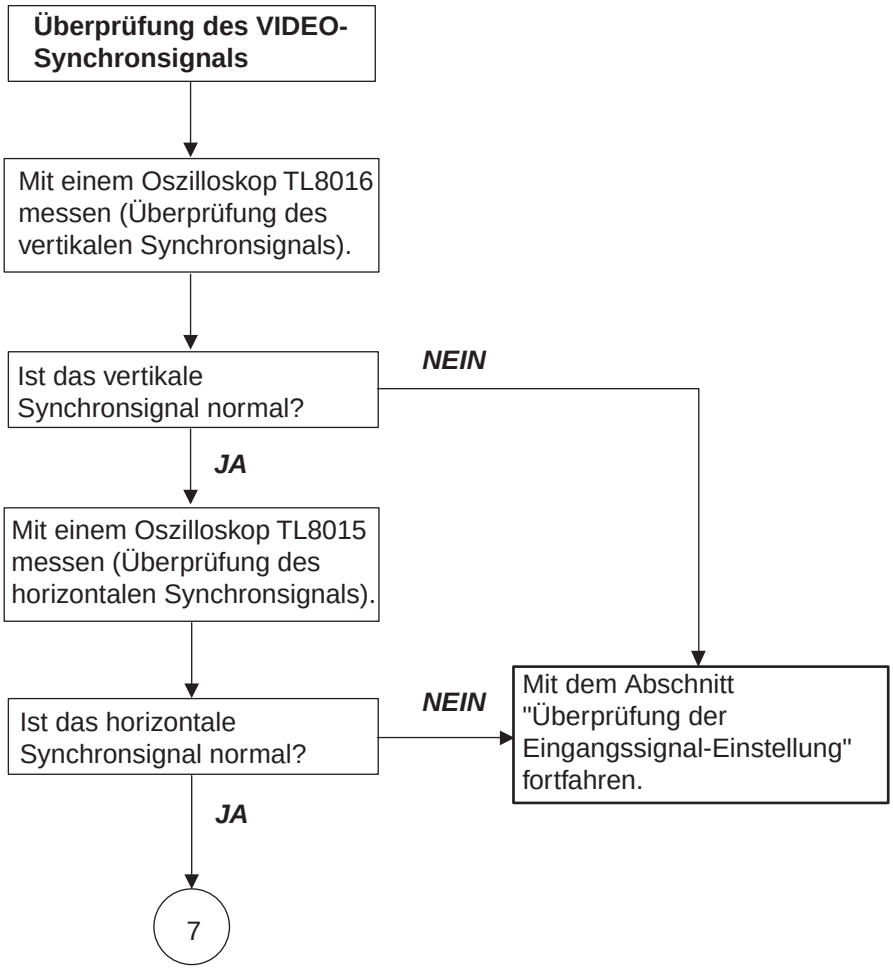

Überprüfung der Peripherie von GA5
Im Mustermenü des Prozessmodus R, G und B separate wählen.
Werden R. G und B eines Bildes richtig gesendet?
JA
Abschluss der Überprüfung der Peripherie von GA5.
NEIN
Mit einem Oszilloskop die Stifte 31, 21 und 11 von SC8004 messen. Diese Signale entsprechen MSB von R/G/B.
Entsprechen die im Mustermenü gewählten Inhalte den gemessenen Signalen?
JA
Die Formatter-Leiterplatte ist defekt.
NEIN
Liegt der Takt am Stift 58 von SC8004 an?
NEIN
JA
Liegt der Takt (65 MHz) an FL8009 an?
JA
IC8032 ist defekt.
NEIN
Liegt der Takt (65 MHz) an FL8006 an?
NEIN
X8004 ist defekt.
JA
IC8025 ist defekt.
Mit einem Oszilloskop TL8047, 8048 und 8049 messen.
Entsprechen die im Mustermenü gewählten Inhalte den gemessenen Signalen?
NEIN
IC8025 ist defekt.
JA
IC8032 ist defekt.

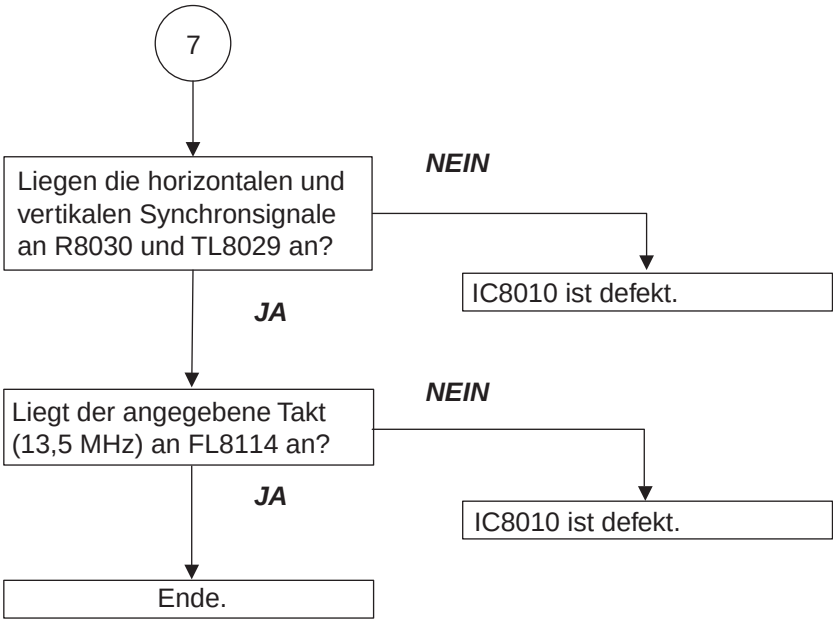

Überprüfung des Komponenteneingangs (exkl. 480i)
INPUT1 das Komponentensignal zuführen.
Mit der Feldtaste oder Fernbedienung INPUT1 auswählen.
Wird ein Bild gesendet?
NEIN
JA
Mit dem Abschnitt "Überprüfung der SOG-Schaltung"
4
Sind die Farben normal?
JA
NEIN
Entspricht der Signaltyp der Komponente?
NEIN
JA
Den Signaltyp auf die Komponente einstellen.
Die Prozesseinstellung ausführen.
4
Wird die Kontur richtig angezeigt?
NEIN
JA
Die Komponente ist normal. Ende.
IC8017 oder IC8025 ist defekt.

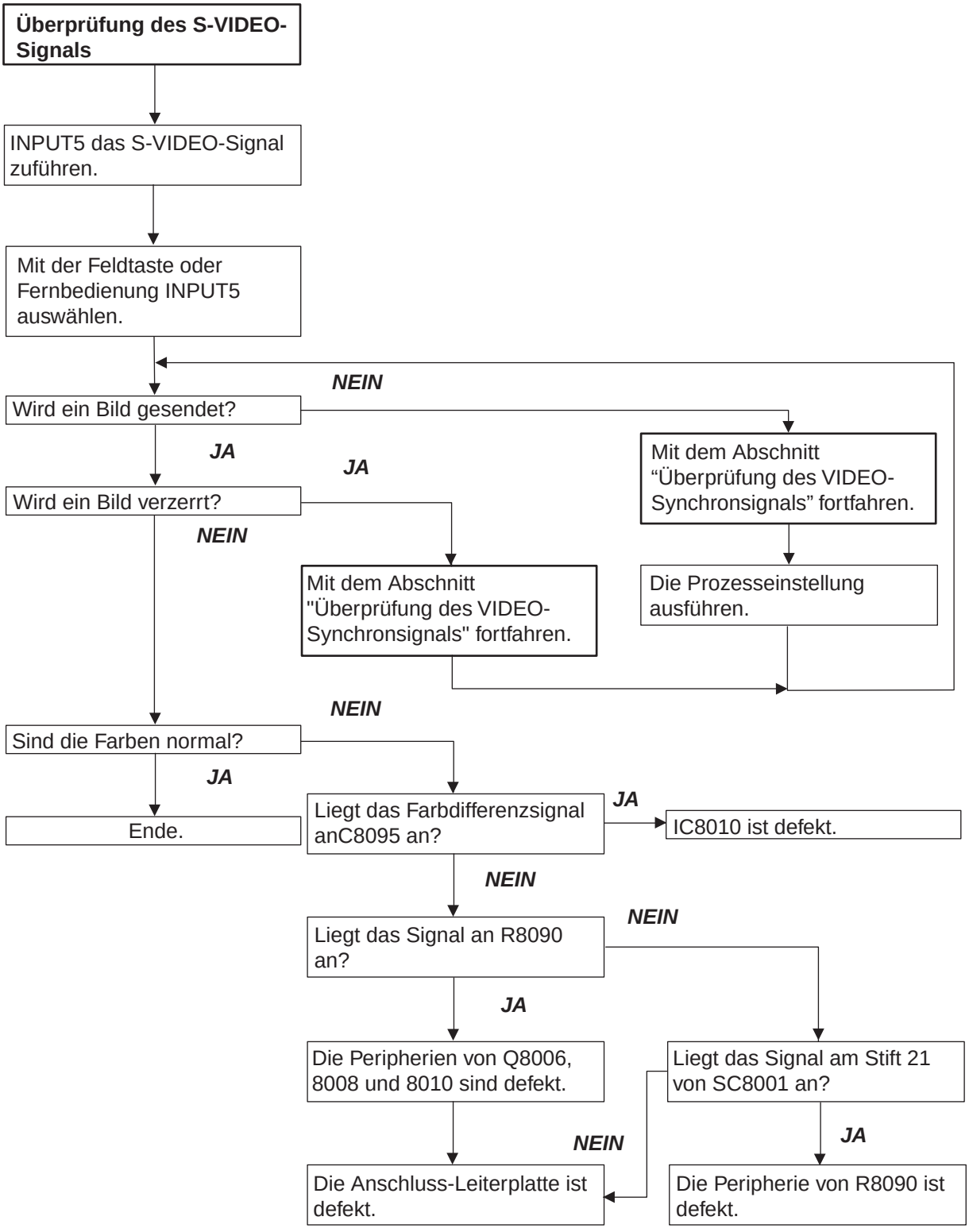

Überprüfung der SOG-Schaltung
Mit einem Oszilloskop TL8017 messen.
Wird das Composite-Synchronsignal zeitlich richtig wiedergegeben?
JA
Die SOG-Schaltung ist normal.Ende.
NEIN
Mit einem Oszilloskop die Anschlussfläche von C8149 messen.
Ist das Y-Signal mit dem Synchronsignal vorhanden?
NEIN
JA
Mit dem Abschnitt "Überprüfung der Eingangssignal-Einstellung" fortfahren.
Der Impulstrennkreis (Peripherie von IC8015) ist defekt.

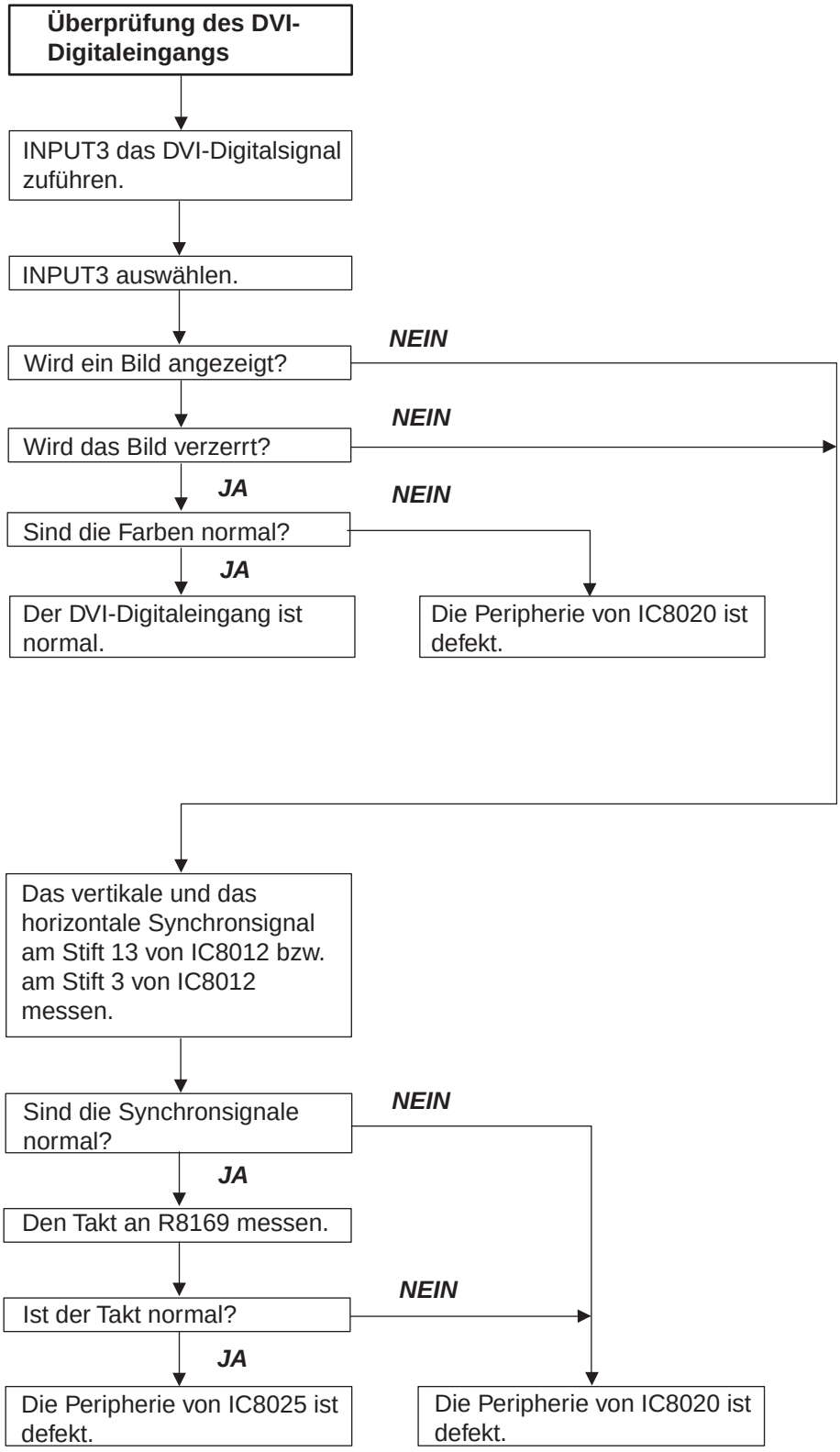

Überprüfung des VIDEO-Signals
INPUT4 das Composite-VIDEO-Signal zuführen.
Mit der Feldtaste oder Fernbedienung INPUT4 auswählen.
5
Wird ein Bild angezeigt?
NEIN
JA
Wird ein Bild verzerrt?
JA
Mit dem Abschnitt "Überprüfung des VIDEO-Synchronsignals" fortfahren.
Mit dem Abschnitt "Überprüfung des VIDEO-Synchronsignals" fortfahren.
Sind die Farben normal?
NEIN
Überprüfung des S-VIDEO-Signals
Die Prozesseinstellung ausführen.
5
Liegt das VIDEO-Signal an C8103 an?
NEIN
JA
Liegt das Signal an R8092 an?
NEIN
JA
Die Peripherien von Q8007, 8009 und 8011 sind defekt.
Liegt das Signal am Stift 23 von SC8001 an?
JA
NEIN
Die Peripherie von R8092 ist defekt.
Die Anschluss-Leiterplatte ist defekt.
6


6
An R8048 den Takt von IC8010 messen.
JA
Ist der Takt normal?
NEIN
JA
Überprüfung des VIDEO-Synchronsignals
IC8010 ist defekt.
IC8025 ist defekt.


Überprüfung des VIDEO-Synchronsignals
Mit einem Oszilloskop TL8016 messen (Überprüfung des vertikalen Synchronsignals).
Ist das vertikale Synchronsignal normal?
NEIN
JA
Mit einem Oszilloskop TL8015 messen (Überprüfung des horizontalen Synchronsignals).
Ist das horizontale Synchronsignal normal?
NEIN
Mit dem Abschnitt "Überprüfung der Eingangssignal-Einstellung" fortfahren.
JA
7

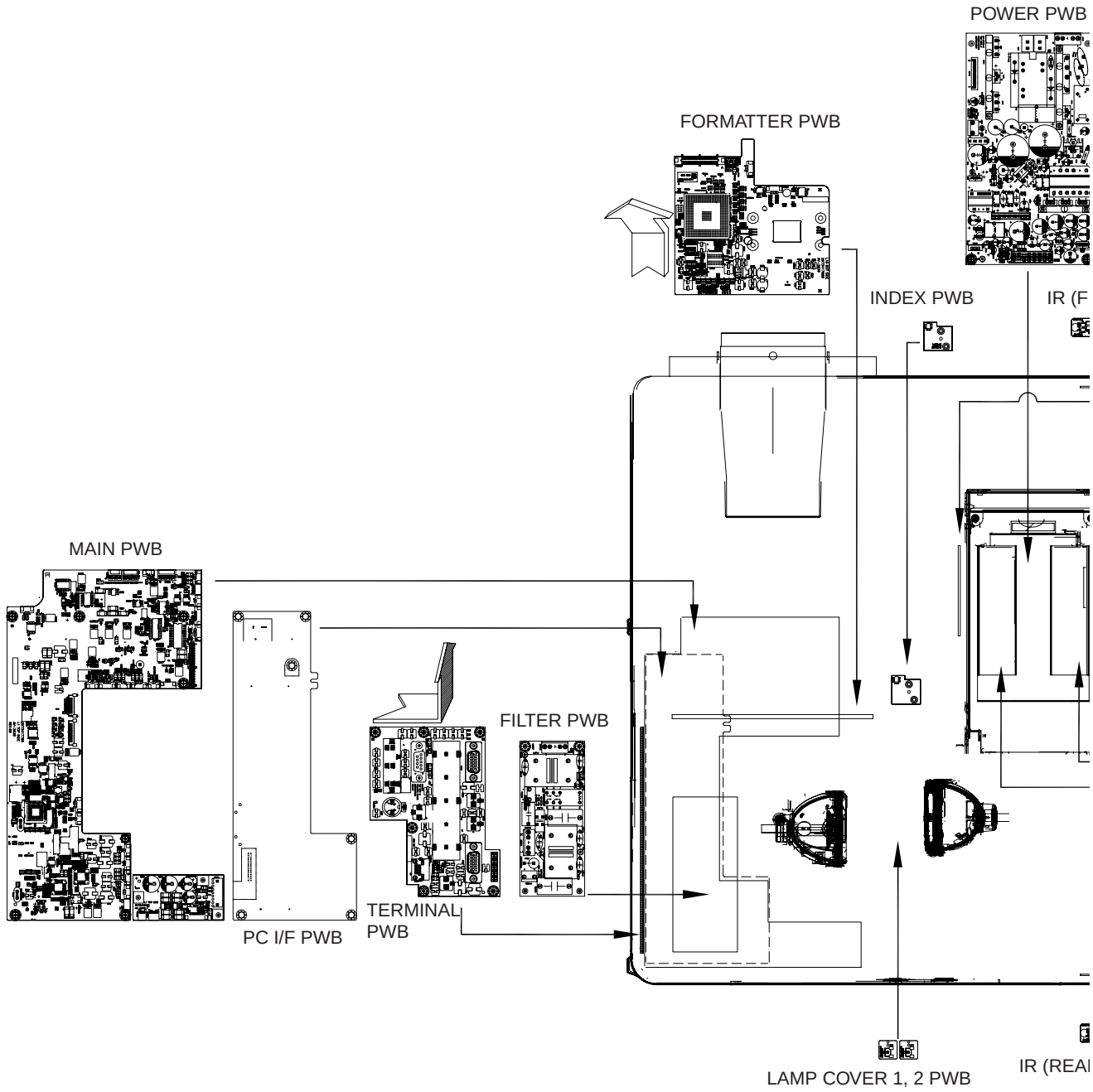

7
Liegen die horizontalen und vertikalen Synchronsignale an R8030 und TL8029 an?
NEIN
IC8010 ist defekt.
JA
Liegt der angegebene Takt (13,5 MHz) an FL8114 an?
NEIN
IC8010 ist defekt.
JA
Ende.

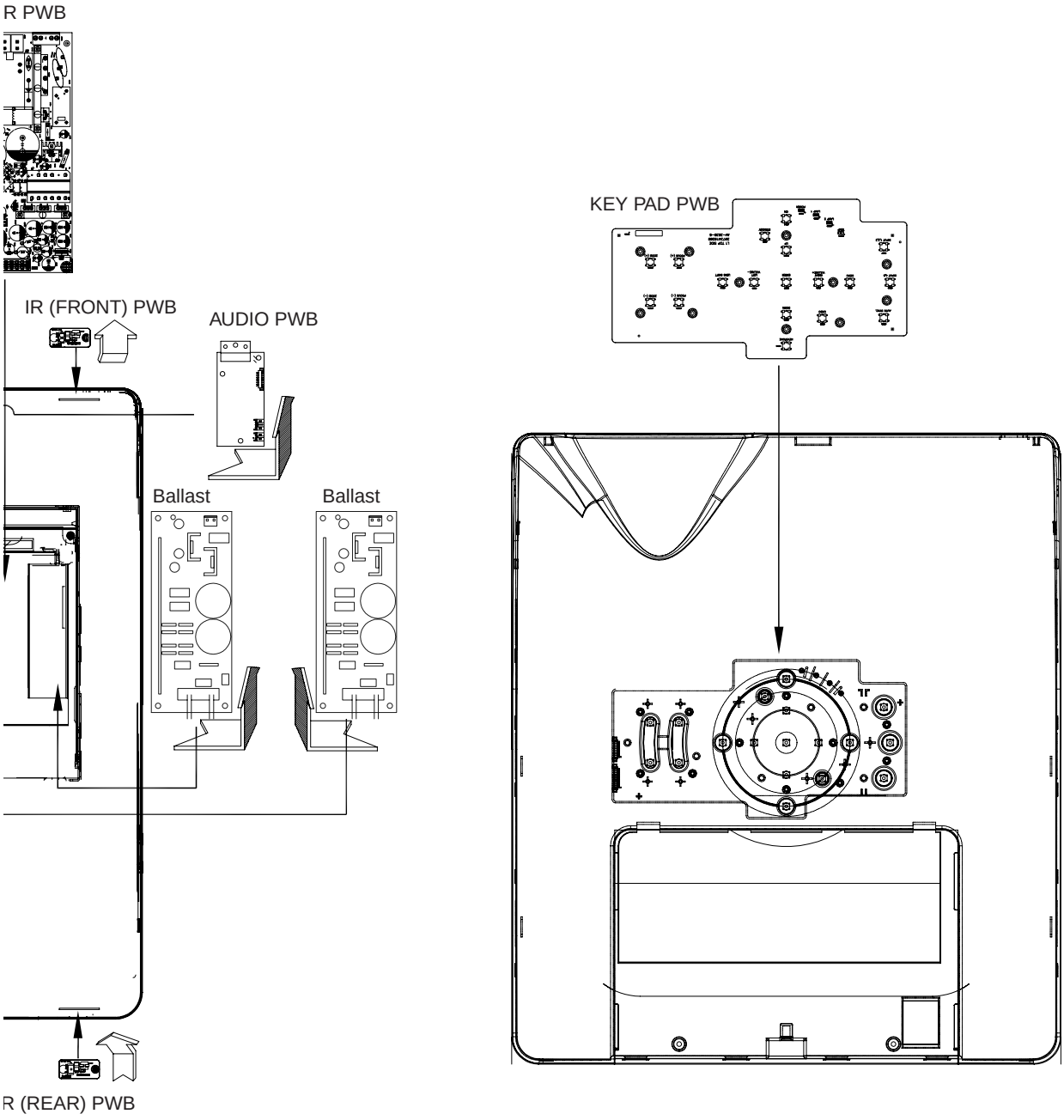

Überprüfung des S-VIDEO-Signals
INPUT5 das S-VIDEO-Signal zuführen.
Mit der Feldtaste oder Fernbedienung INPUT5 auswählen.
Wird ein Bild gesendet?
NEIN
JA
Wird ein Bild verzerrt?
JA
NEIN
Mit dem Abschnitt "Überprüfung des VIDEO-Synchronsignals" fortfahren.
Mit dem Abschnitt "Überprüfung des VIDEO-Synchronsignals" fortfahren.
Die Prozesseinstellung ausführen.
Sind die Farben normal?
NEIN
JA
Ende.
Liegt das Farbdifferenzsignal anC8095 an?
JA
IC8010 ist defekt.
NEIN
Liegt das Signal an R8090 an?
NEIN
JA
Die Peripherien von Q8006, 8008 und 8010 sind defekt.
Liegt das Signal am Stift 21 von SC8001 an?
NEIN
JA
Die Anschluss-Leiterplatte ist defekt.
Die Peripherie von R8090 ist defekt.


Überprüfung des DVI-Digitaleingangs
INPUT3 das DVI-Digitalsignal zuführen.
INPUT3 auswählen.
Wird ein Bild angezeigt?
NEIN
Wird das Bild verzerrt?
NEIN
JA
Sind die Farben normal?
NEIN
JA
Der DVI-Digitaleingang ist normal.
Die Peripherie von IC8020 ist defekt.
Das vertikale und das horizontale Synchronsignal am Stift 13 von IC8012 bzw. am Stift 3 von IC8012 messen.
Sind die Synchronsignale normal?
NEIN
JA
Den Takt an R8169 messen.
Ist der Takt normal?
NEIN
JA
Die Peripherie von IC8025 ist defekt.
Die Peripherie von IC8020 ist defekt.

- M E M O -

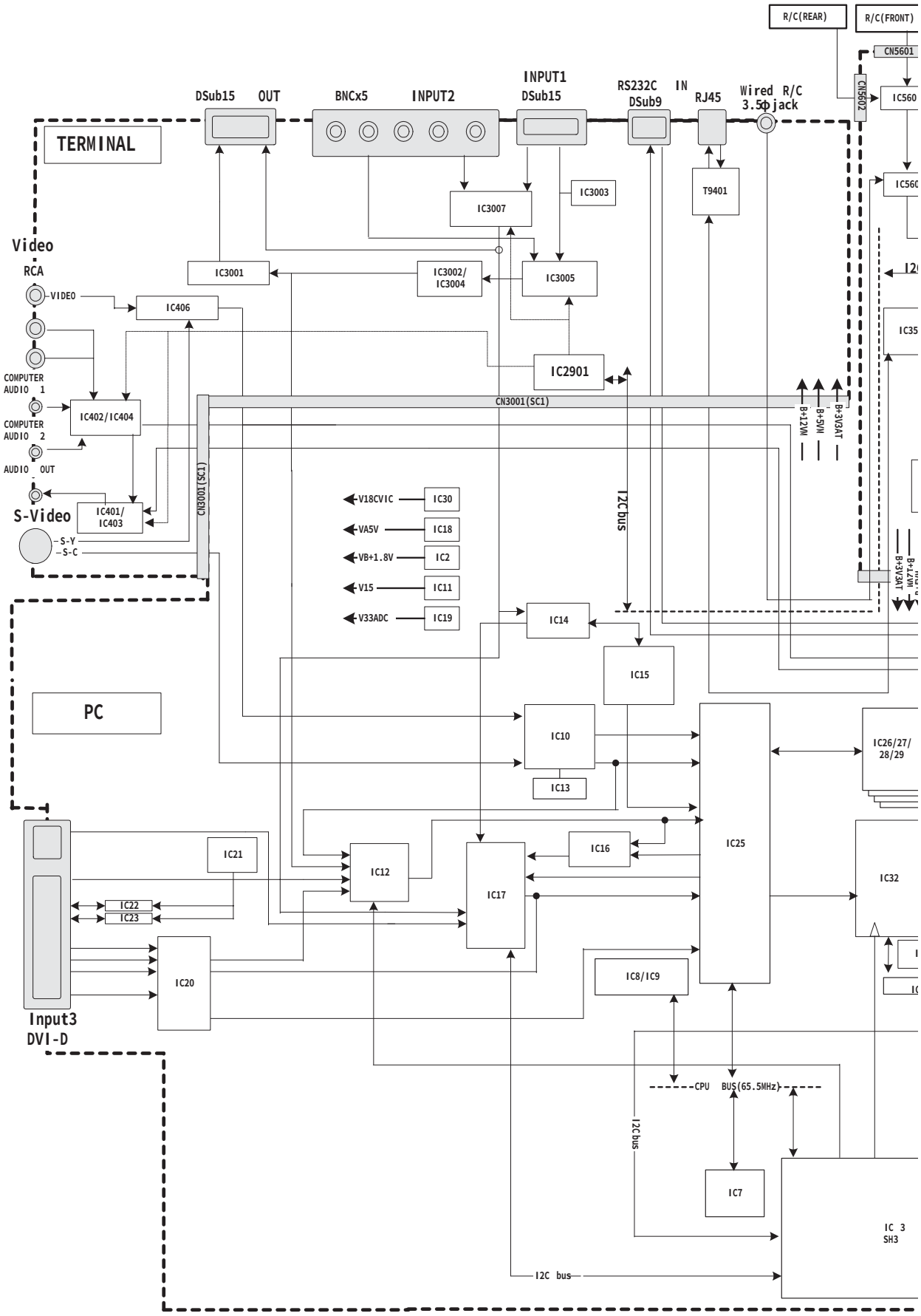
CHASSIS LAYOUT / CHASSIS-ANORDNUNG

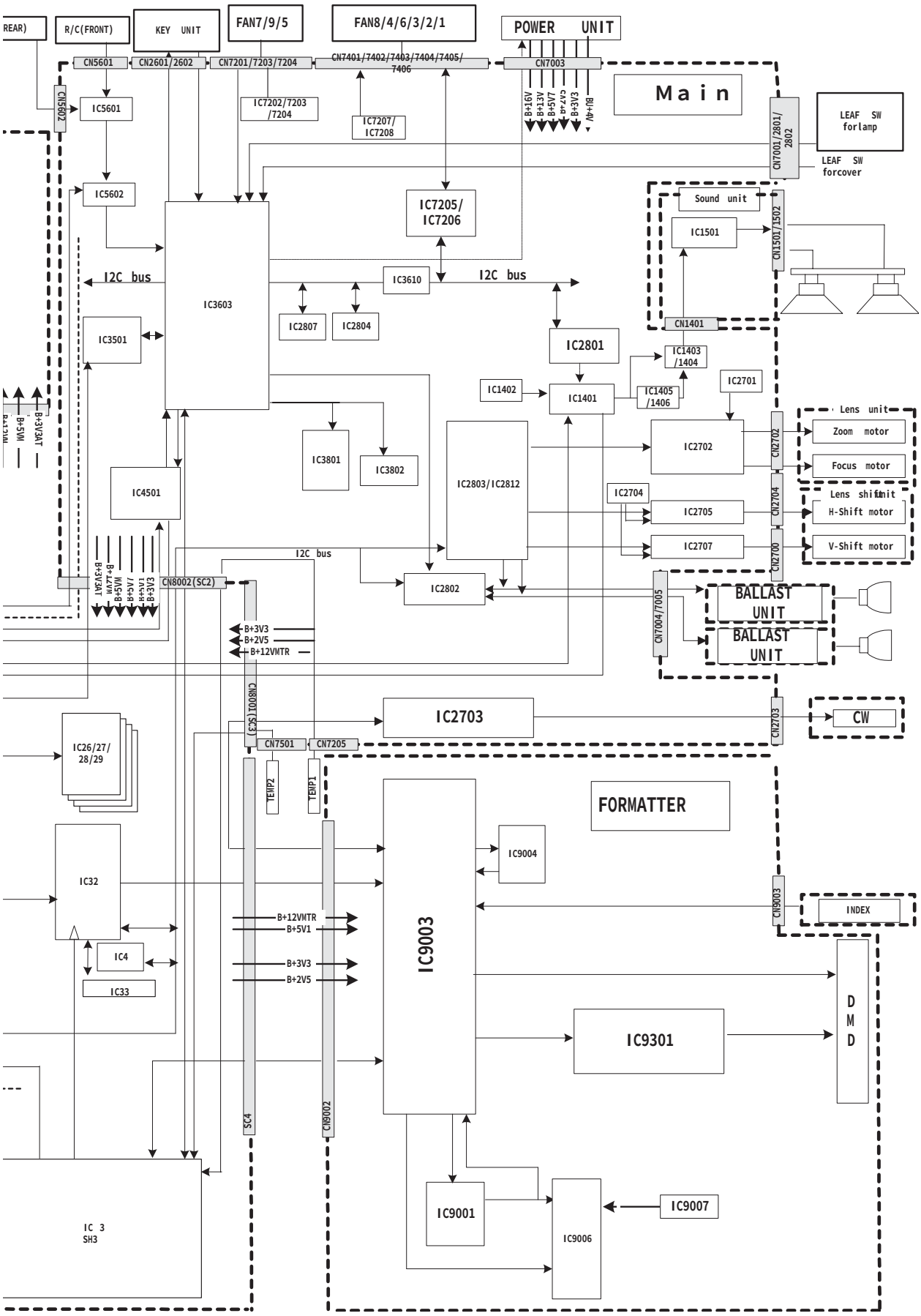




10	11	12	13	14	15	16	17	18	19

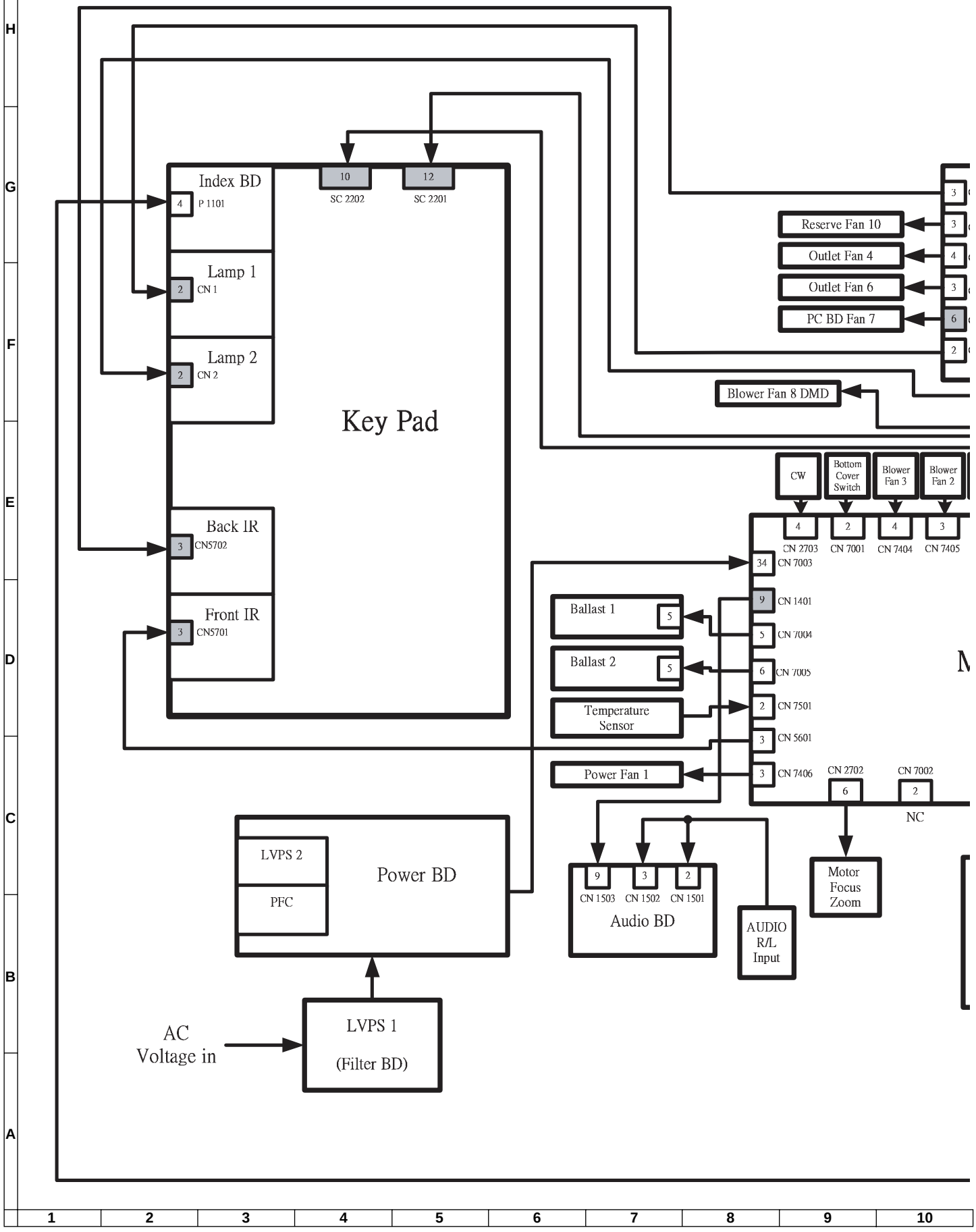
BLOCK DIAGRAM / BLOCKSCHALTBILD

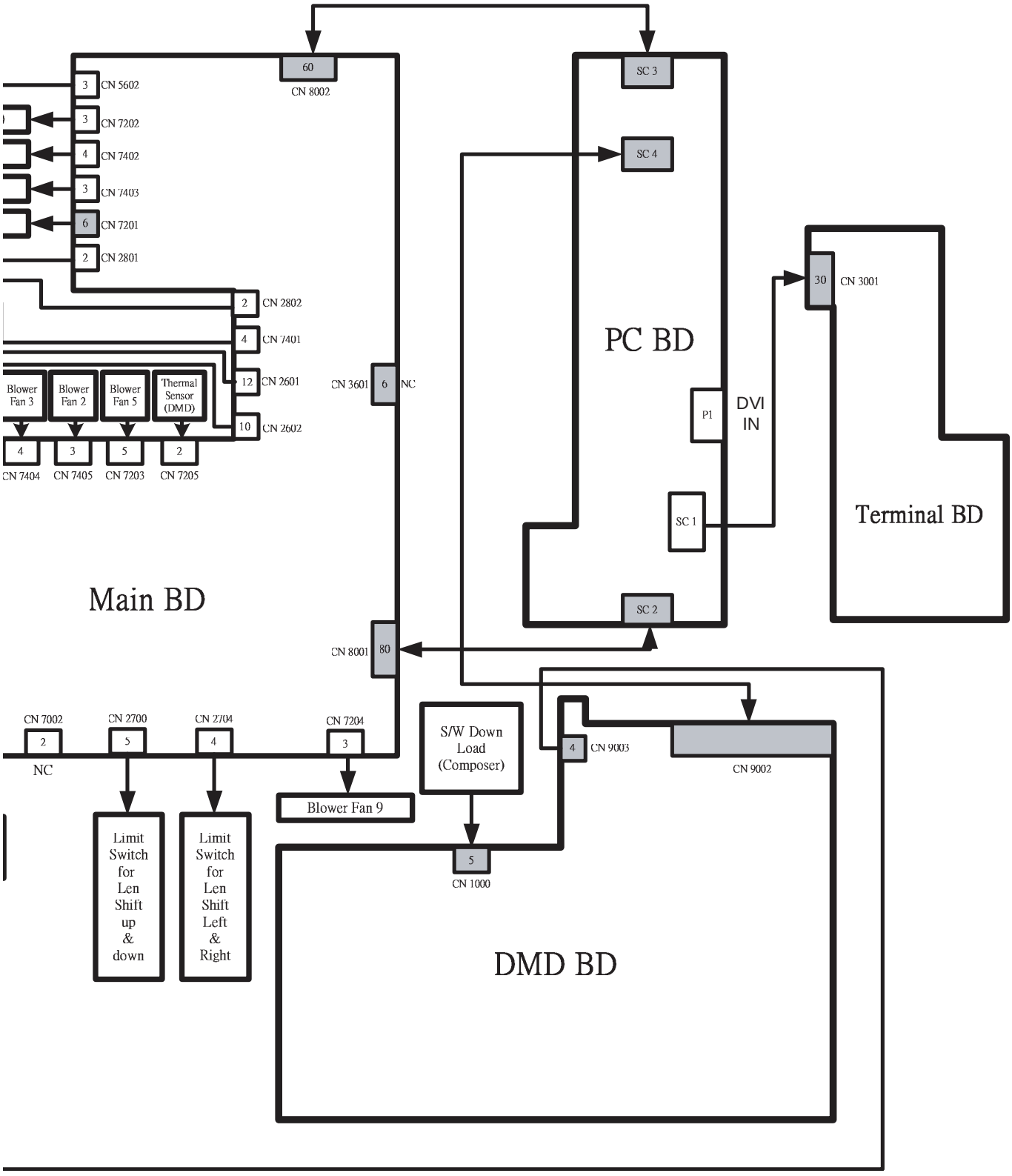




10	11	12	13	14	15	16	17	18	19

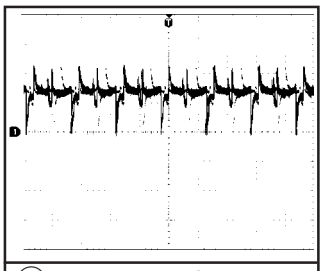
OVERALL WIRING DIAGRAM / GESAMTSCHALTPLAN



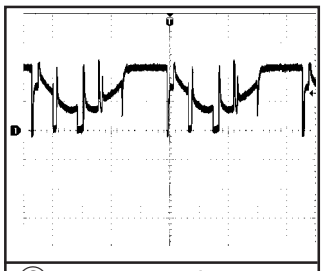


10	11	12	13	14	15	16	17	18	19

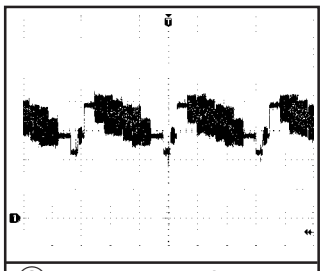
WAVEFORMS / WELLENFORMEN



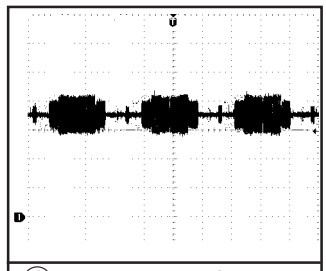
① CN2703 4-pin
(MAIN PWB)
(CWCTR)
H:200µ sec/div
V:5V/div



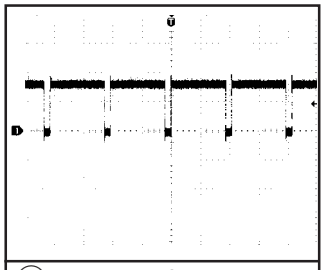
② CN2703 1-pin
(MAIN PWB)
(CWY1)
H:200µ sec/div
V:5V/div



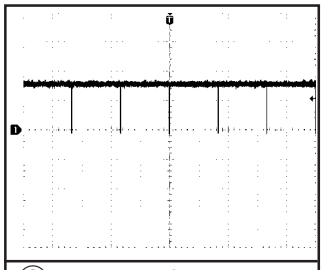
③ CN3001 23-pin
(TERMINAL PWB)
(VIDEOI)
H:20µ sec/div
V:500mV/div



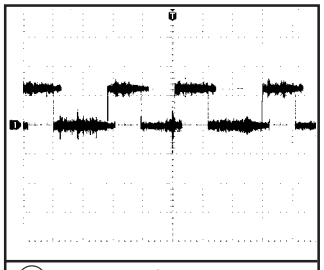
④ CN3001 21-pin
(TERMINAL PWB)
(S-CI)
H:20µ sec/div
V:500mV/div



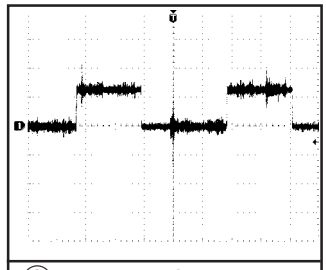
⑤ IC17 45-pin
(PC I/F PWB)
(AD-HSIN)
H:10µ sec/div
V:2V/div



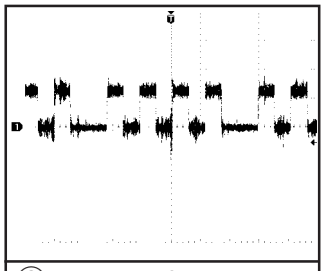
⑥ IC17 44-pin
(PC I/F PWB)
(PCV)
H:10m sec/div
V:2V/div



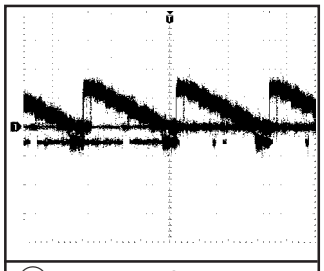
⑦ IC17 5-pin
(PC I/F PWB)
(RAIN0)
H:4µ sec/div
V:500mV/div



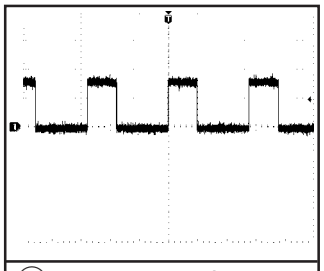
⑧ IC17 13-pin
(PC I/F PWB)
(GAIN0)
H:4µ sec/div
V:500mV/div



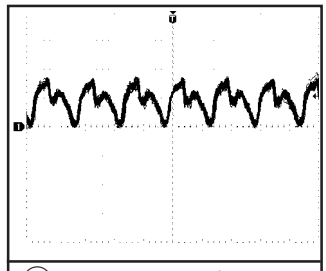
⑨ IC17 20-pin
(PC I/F PWB)
(BAIN0)
H:4µ sec/div
V:500mV/div



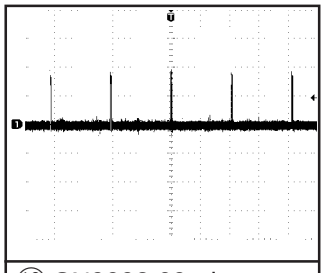
⑩ IC17 17-pin
(PC I/F PWB)
(GAIN1)
H:20µ sec/div
V:500mV/div



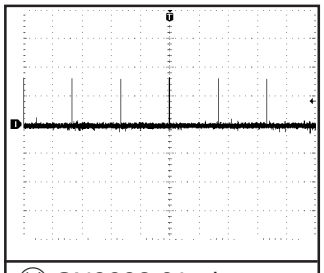
⑪ CN9002 38-pin
(FORMATTER PWB)
(LAMPEN)
H:2m sec/div
V:2V/div



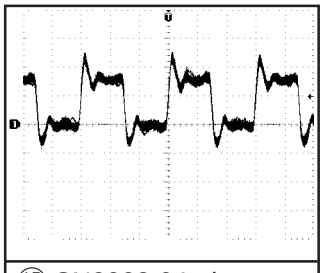
⑫ CN9002 58-pin
(FORMATTER PWB)
(CLKIN)
H:10n sec/div
V:1V/div



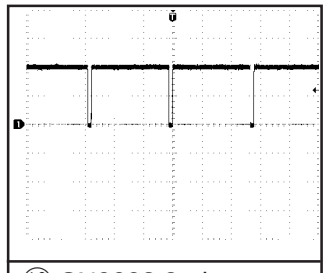
⑬ CN9002 60-pin
(FORMATTER PWB)
(HSYNCZ)
H:10µsec/div
V:2V/div



⑭ CN9002 61-pin
(FORMATTER PWB)
(VSYNCZ)
H:10m sec/div
V:2V/div

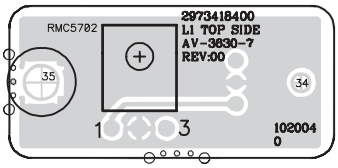


⑮ CN9002 64-pin
(FORMATTER PWB)
(SSPO_CLK)
H:40n sec/div
V:2V/div

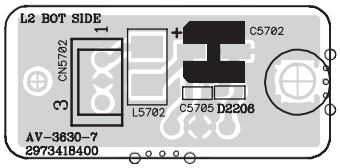


⑯ CN9003 2-pin
(FORMATTER PWB)
(CWINDEX)
H:2m sec/div
V:2V/div

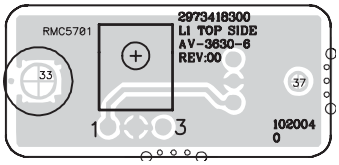
PRINTED WIRING BOARD ASSEMBLIES
LEITERPLATTENEINHEITEN



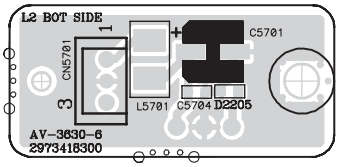
IR (FRONT) Unit (Side A)
IR(VOLDER)-Einheit (Seite-A)



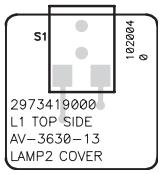
IR (FRONT) Unit (Side B)
IR(VOLDER)-Einheit (Seite-B)



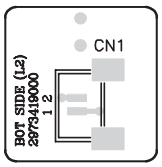
IR (BACK) Unit (Side A)
IR(RÜCKEN)-Einheit (Seite-A)



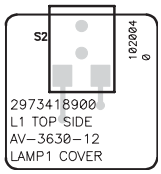
IR (BACK) Unit (Side B)
IR(RÜCKEN)-Einheit (Seite-B)



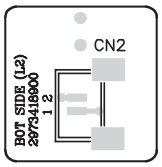
LAMP1 COVER Unit (Side A)
LAMPEN1-COVER-Einheit (Seite-A)



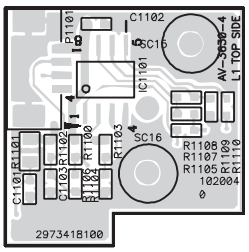
LAMP1 COVER Unit (Side B)
LAMPEN1-COVER-Einheit (Seite-B)



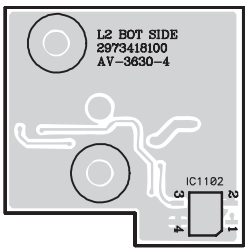
LAMP2 COVER Unit (Side A)
LAMPEN2-COVER-Einheit (Seite-A)



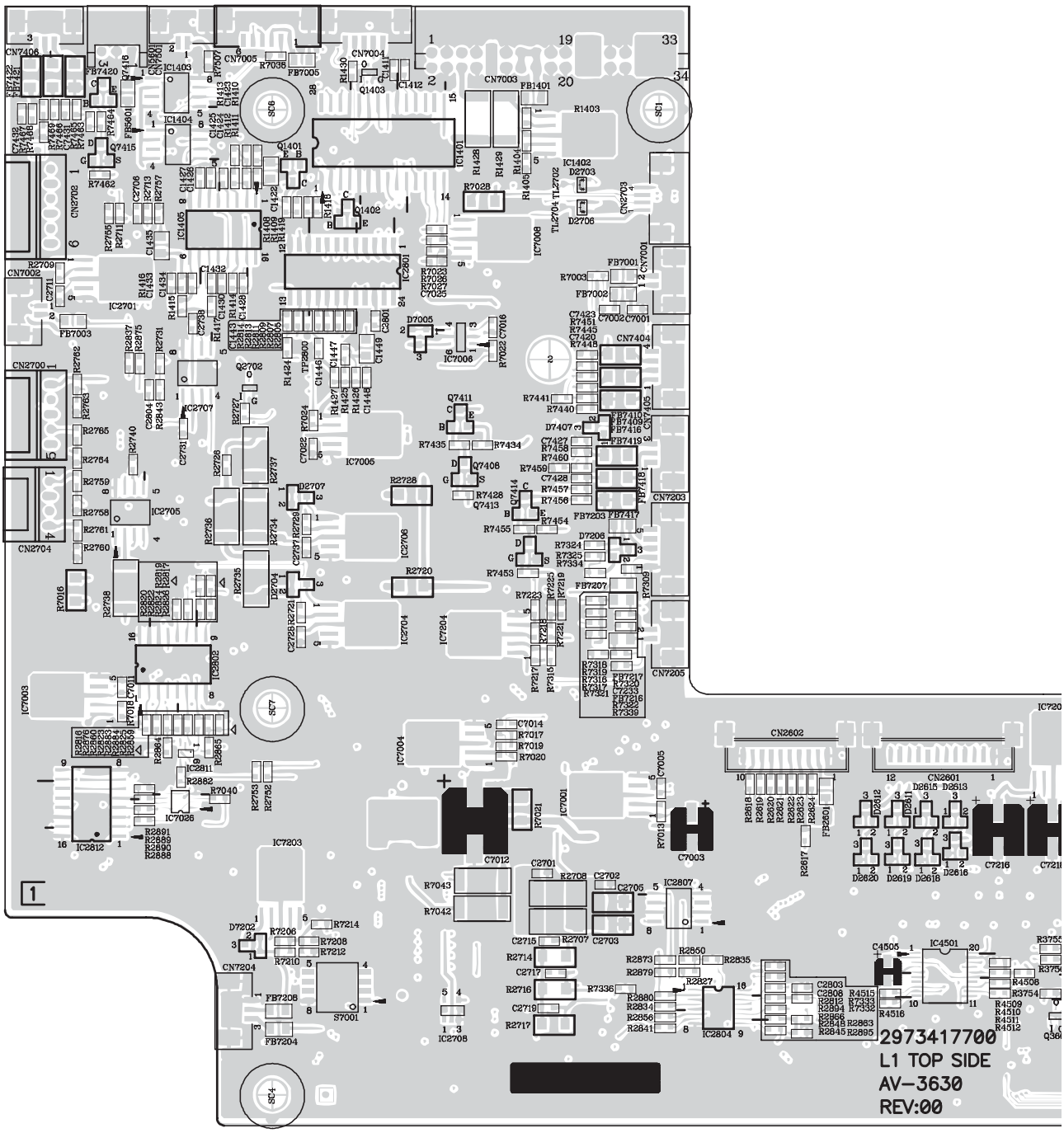
LAMP2 COVER Unit (Side B)
LAMPEN2-COVER-Einheit (Seite-B)



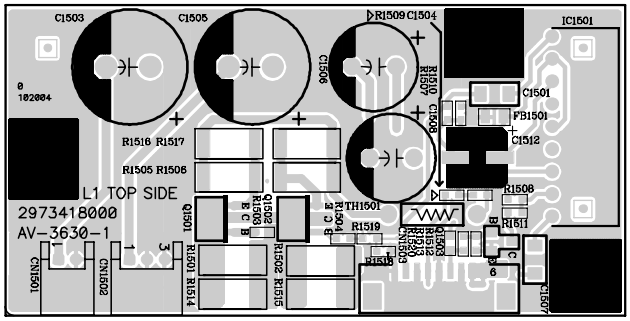
INDEX Unit (Side A)
INDEX-Einheit (Seite-A)



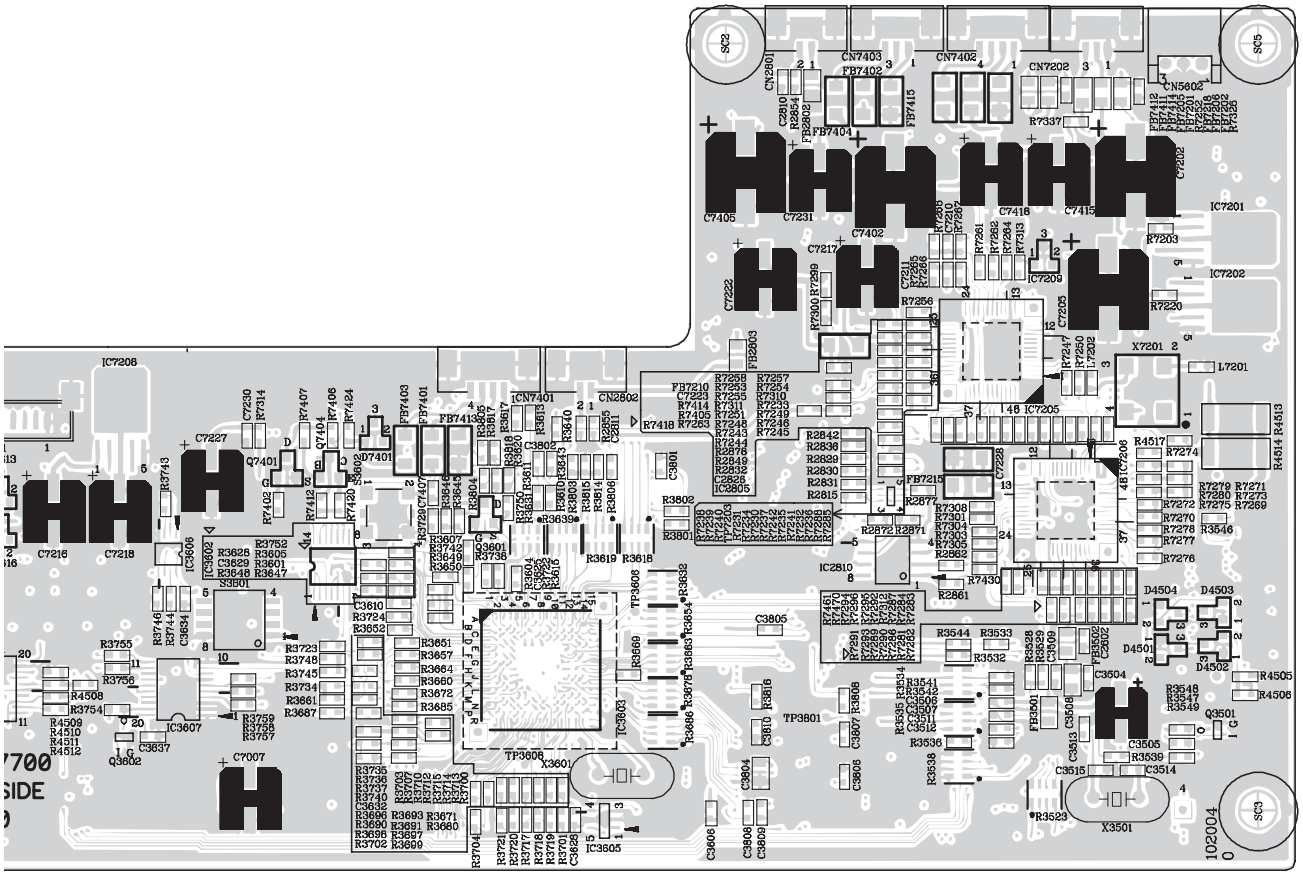
INDEX Unit (Side B)
INDEX-Einheit (Seite-B)



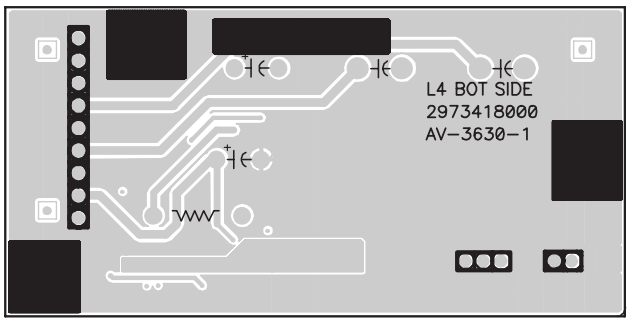
MAIN Unit (Side-A)
HAUPT-Einheit (Seite-A)



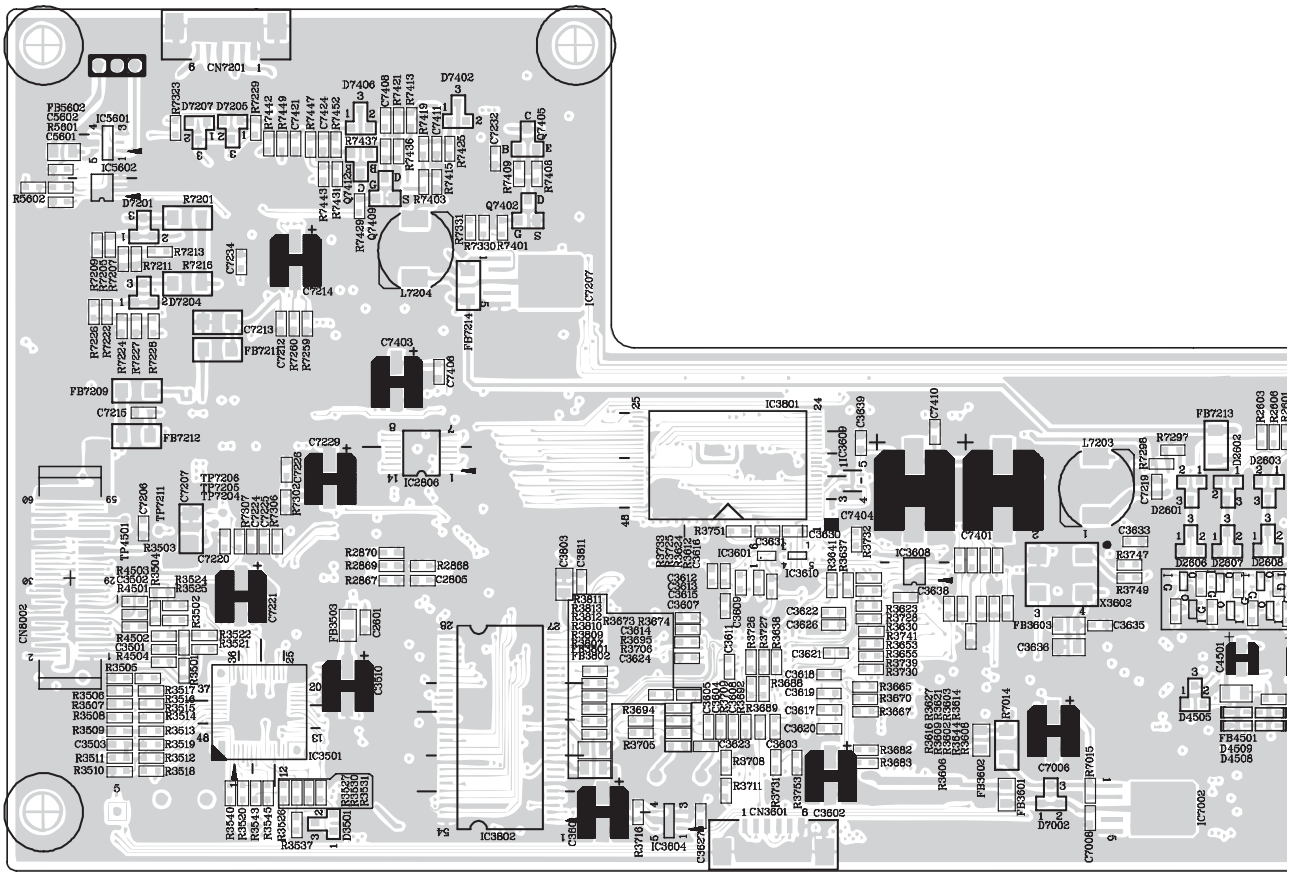
AUDIO Unit (Side-A)
AUDIO-Einheit (Seite-A)



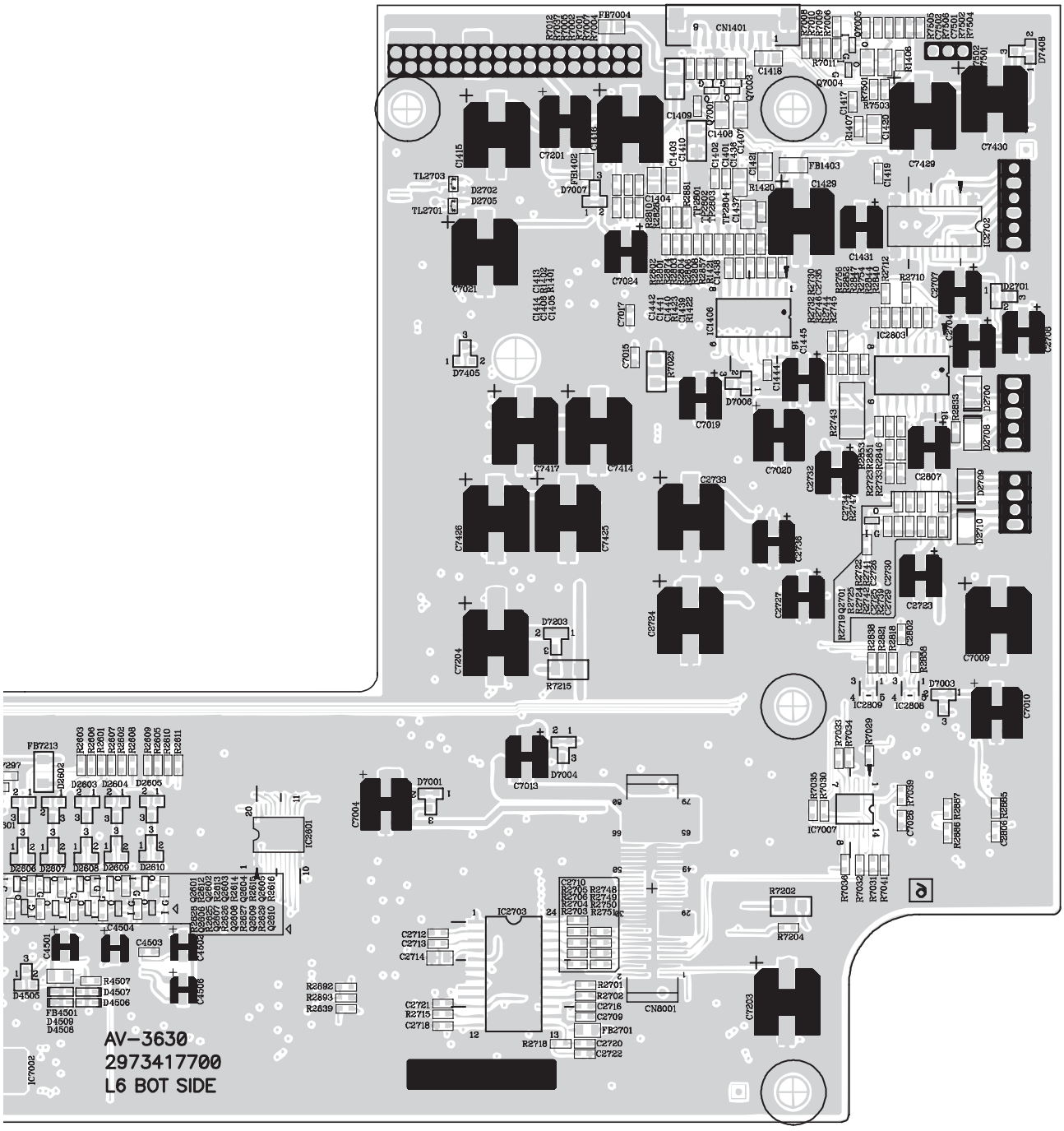
10	11	12	13	14	15	16	17	18	19



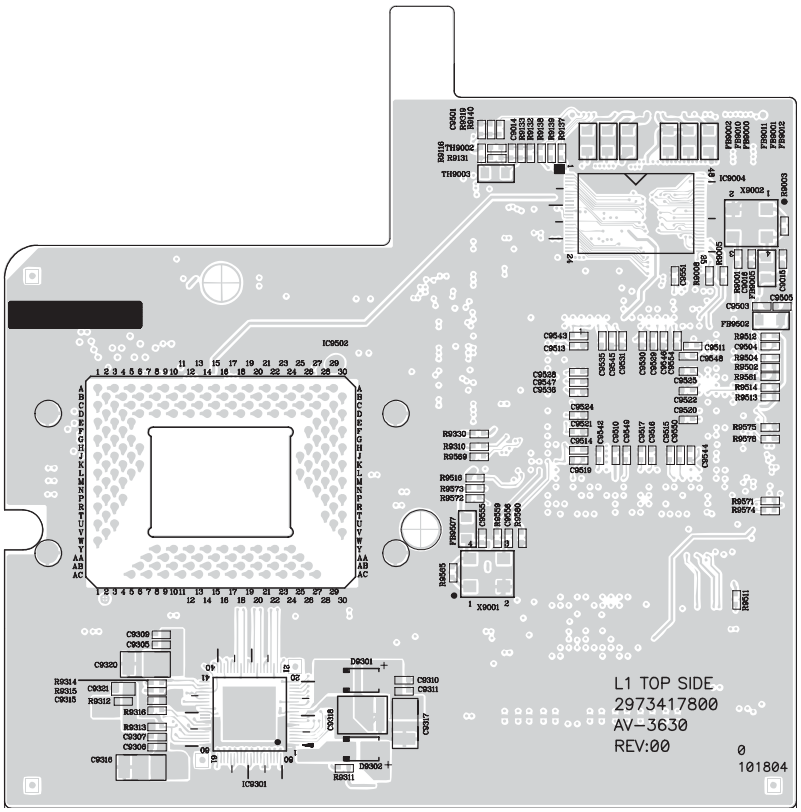
AUDIO Unit (Side-B)
AUDIO-Einheit (Seite-B)



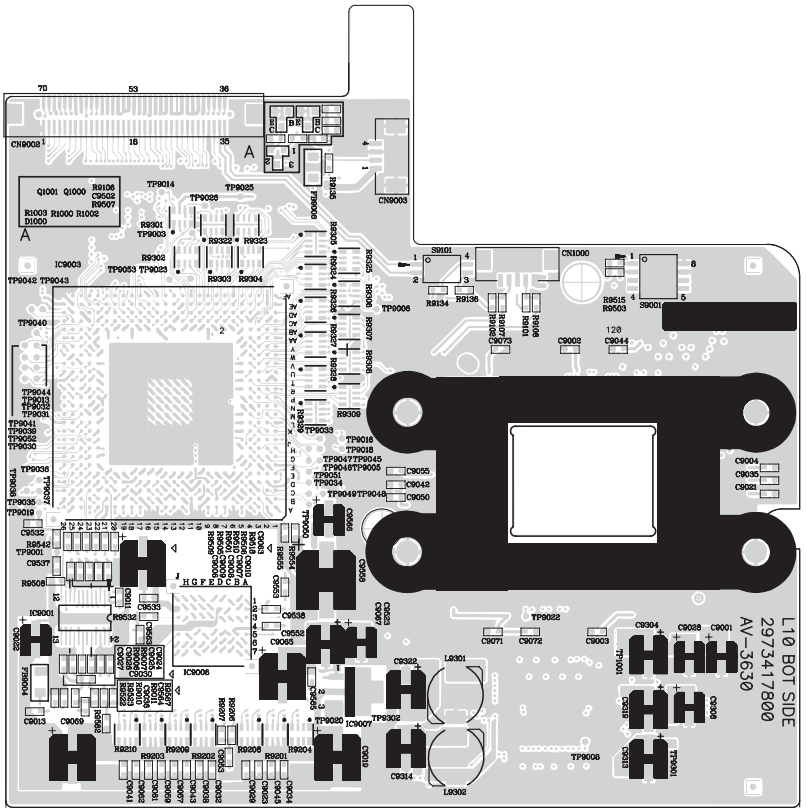
MAIN Unit (Side-B)
HAUPT-Einheit (Seite-B)



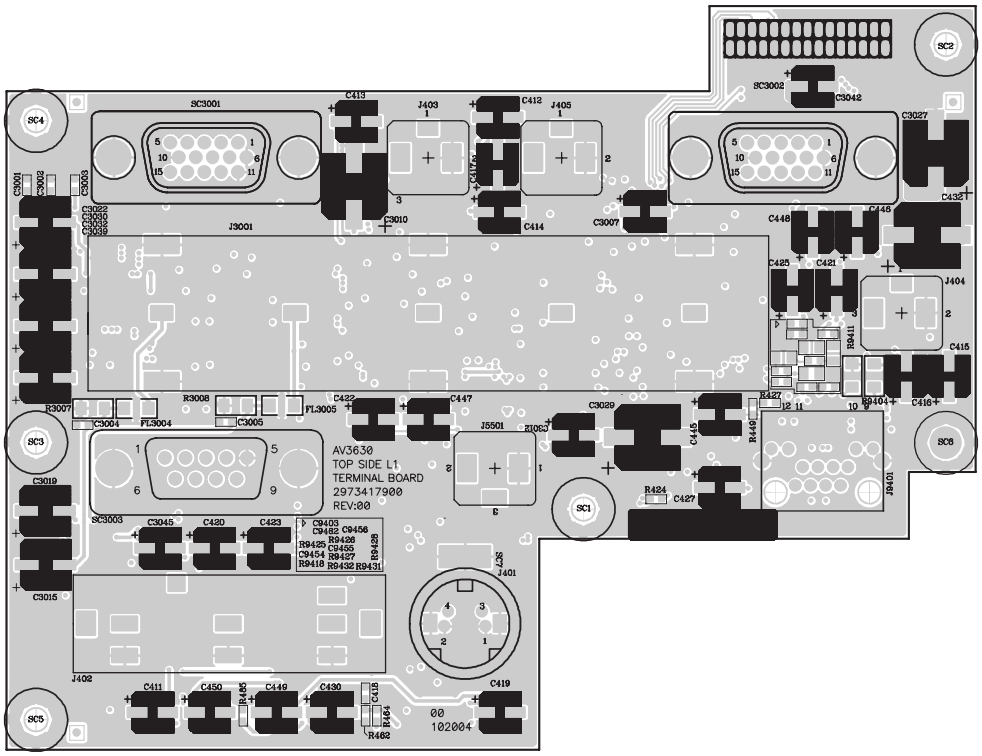
10	11	12	13	14	15	16	17	18	19



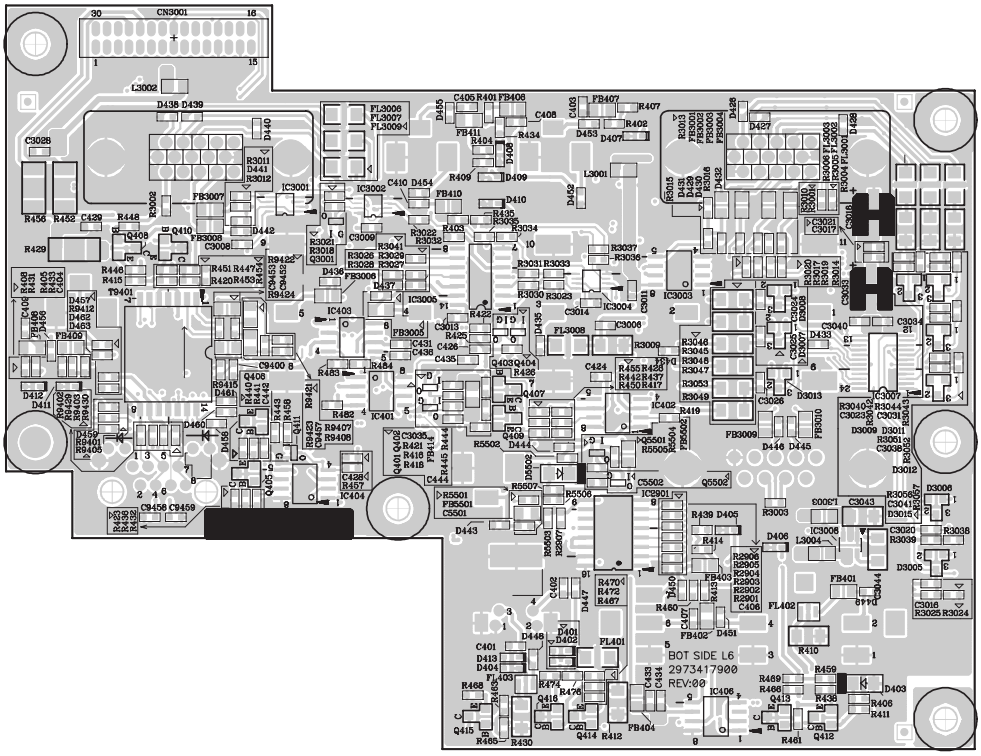
FORMATTER Unit (Side-A)
FORMATTER-Einheit (Seite-A)



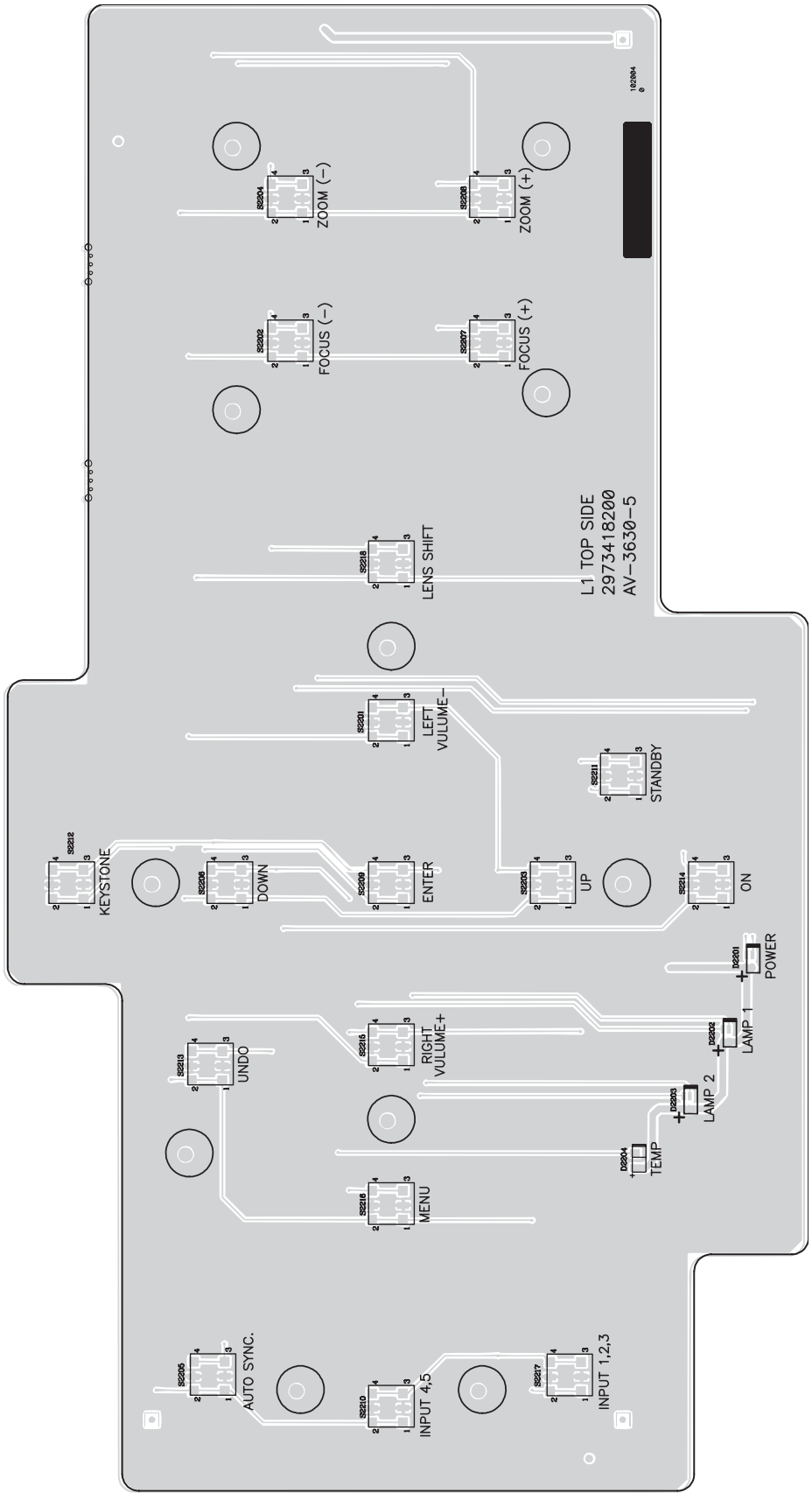
FORMATTER Unit (Side-B)
FORMATTER-Einheit (Seite-B)



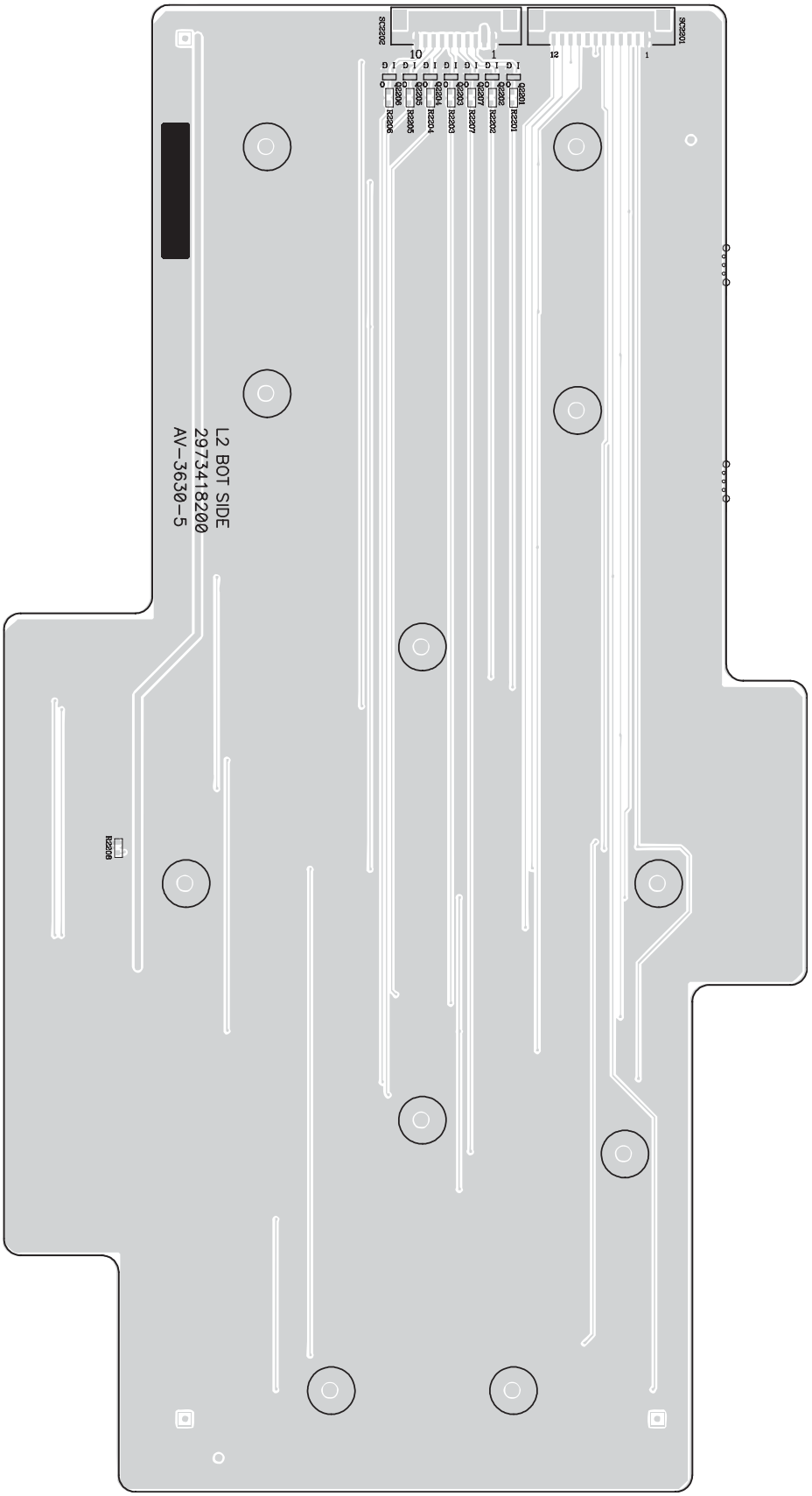
TERMINAL Unit (Side-A)
ANSCHLUSS-Einheit (Seite-A)



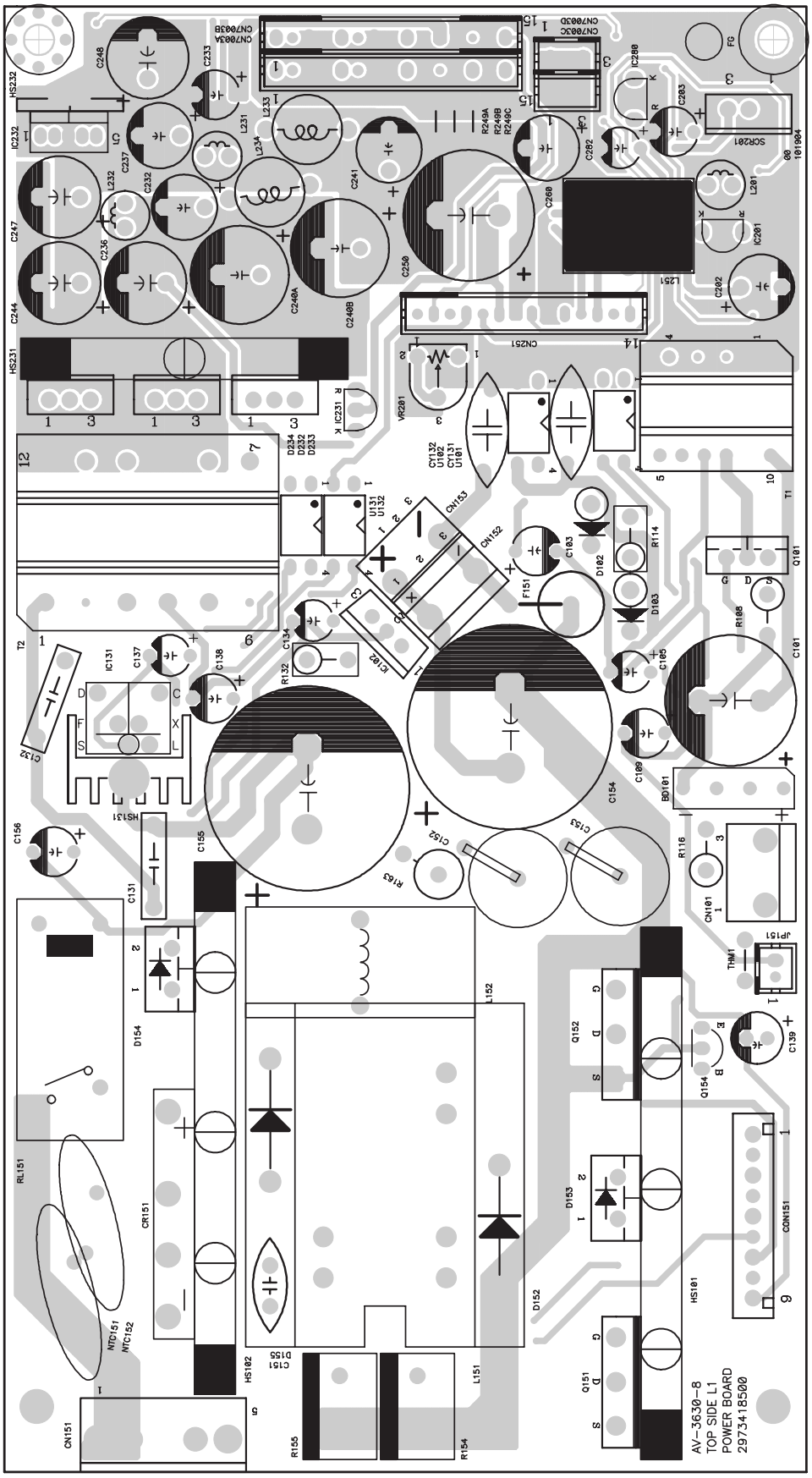
TERMINAL Unit (Side-B)
ANSCHLUSS-Einheit (Seite-B)



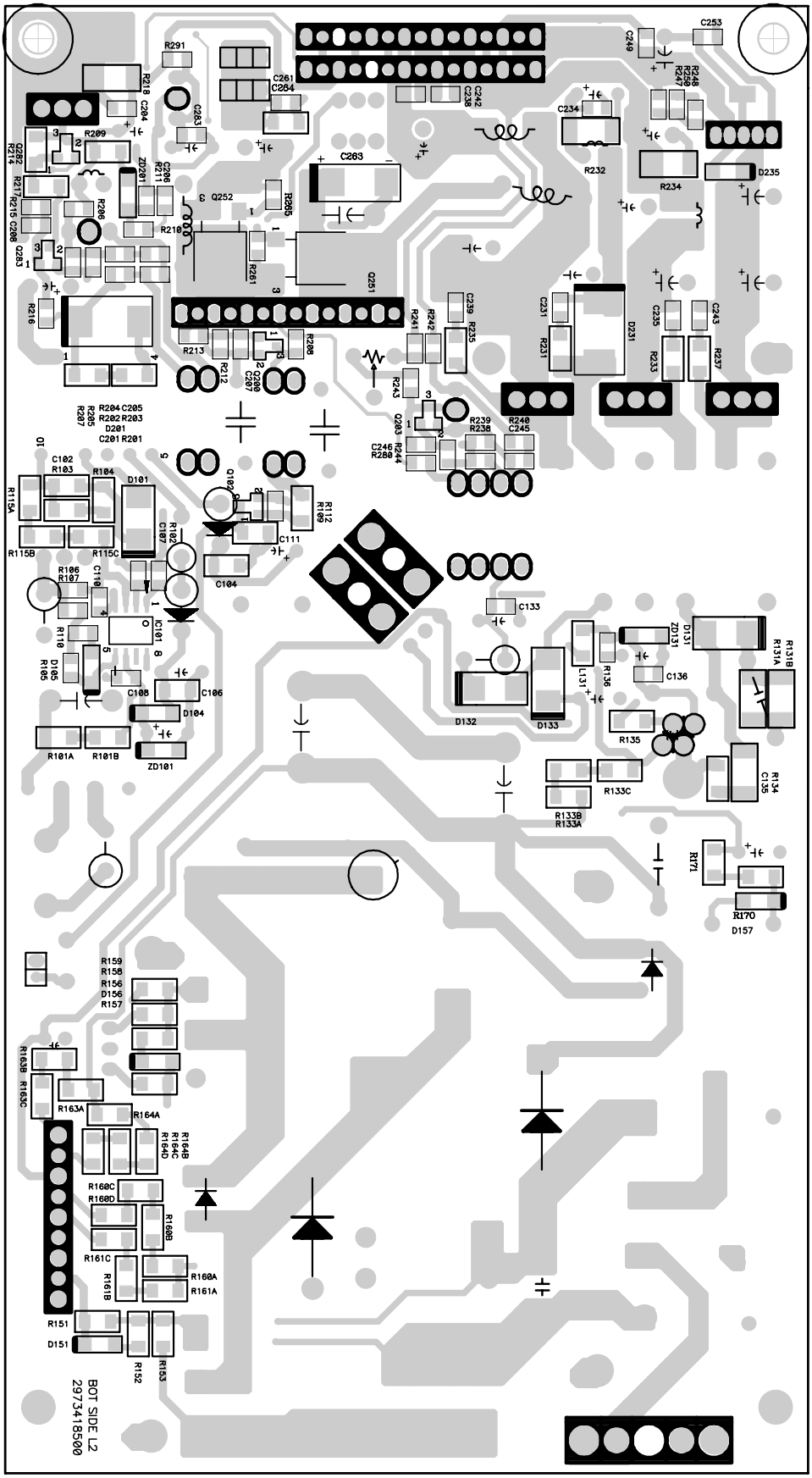
KEYPAD Unit (Side-A)
TASTEN-Einheit (Seite-A)



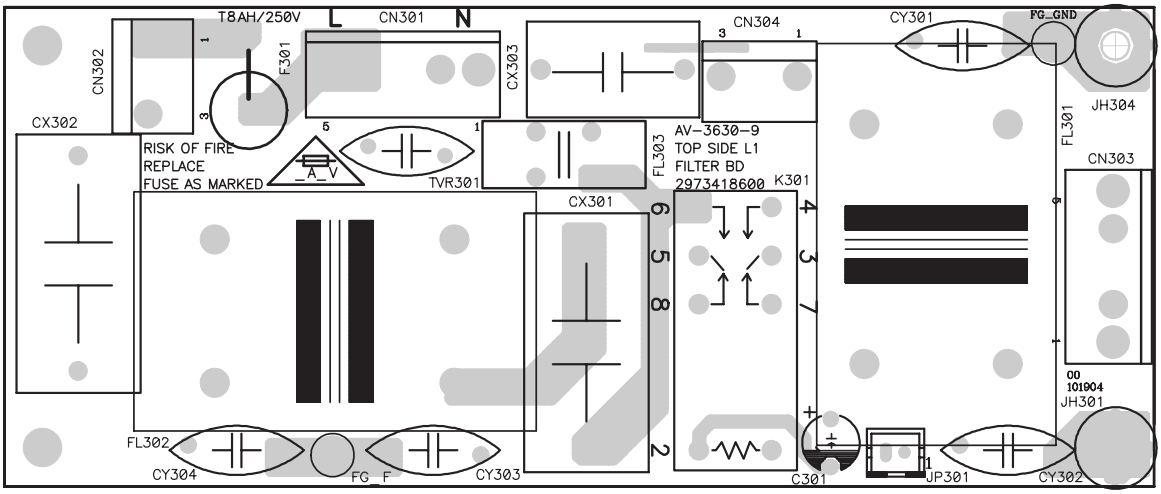
KEYPAD Unit (Side-B)
TASTEN-Einheit (Seite-B)



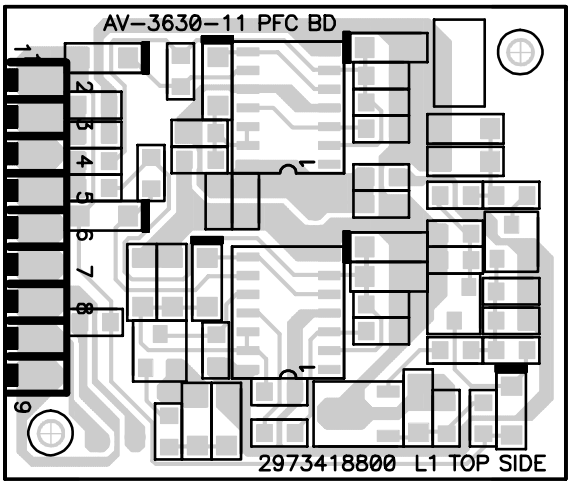
POWER Unit (Side A)
NETZTEIL-Einheit (Seite-A)



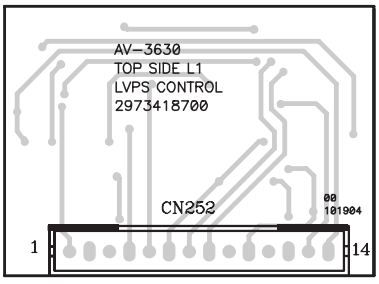
POWER Unit (Side B)
NETZTEIL-Einheit (Seite-B)



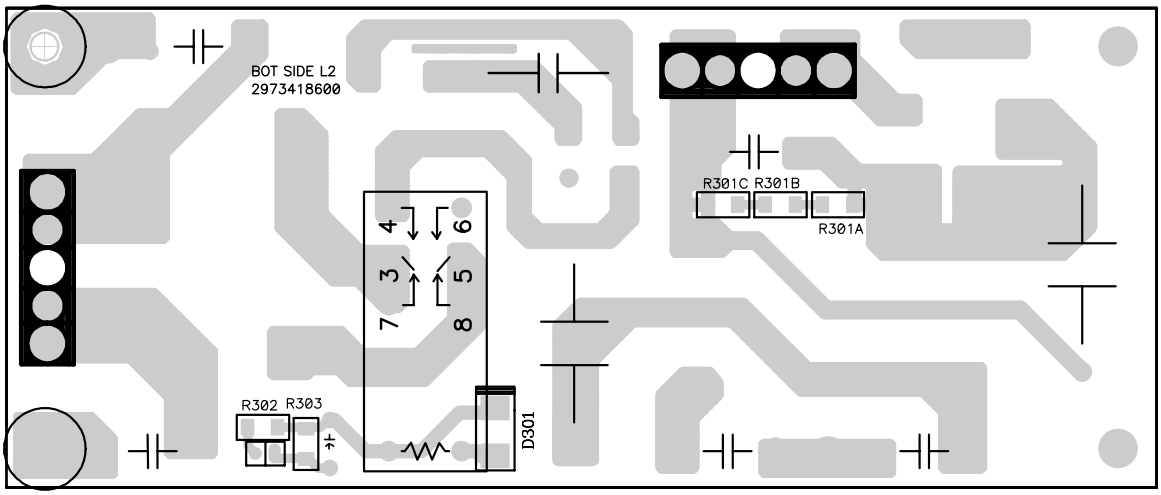
FILTER Unit (Side-A)
FILTER-Einheit (Seite-A)



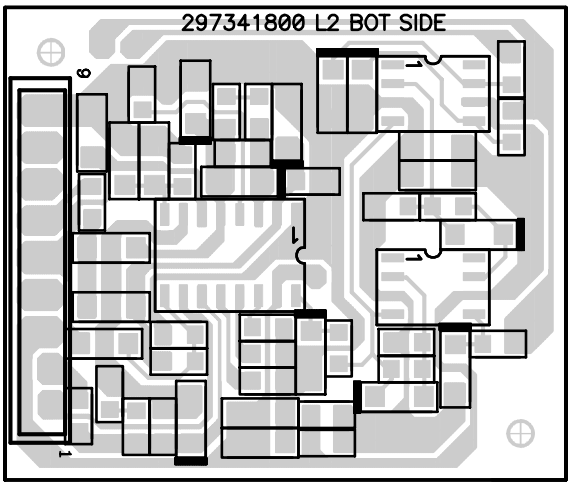
P.F.C CONTROL Unit (Side-A)
P.F.C-kontroll-Einheit (Seite-A)



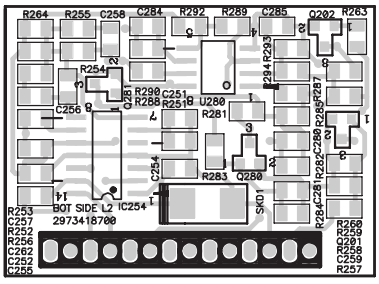
LVPS CONTROL Unit (Side-A)
LVPS-kontroll-Einheit (Seite-A)



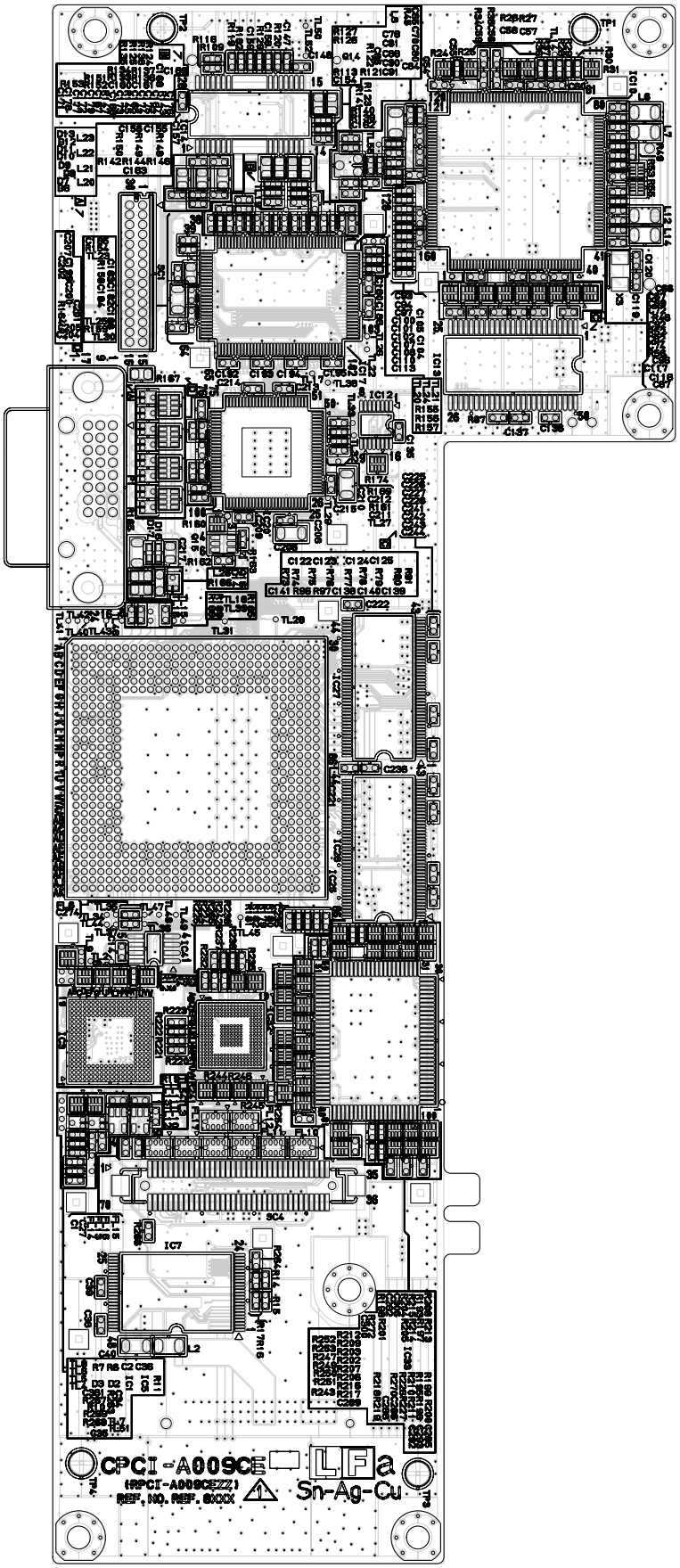
FILTER Unit (Side-B)
FILTER-Einheit (Seite-B)



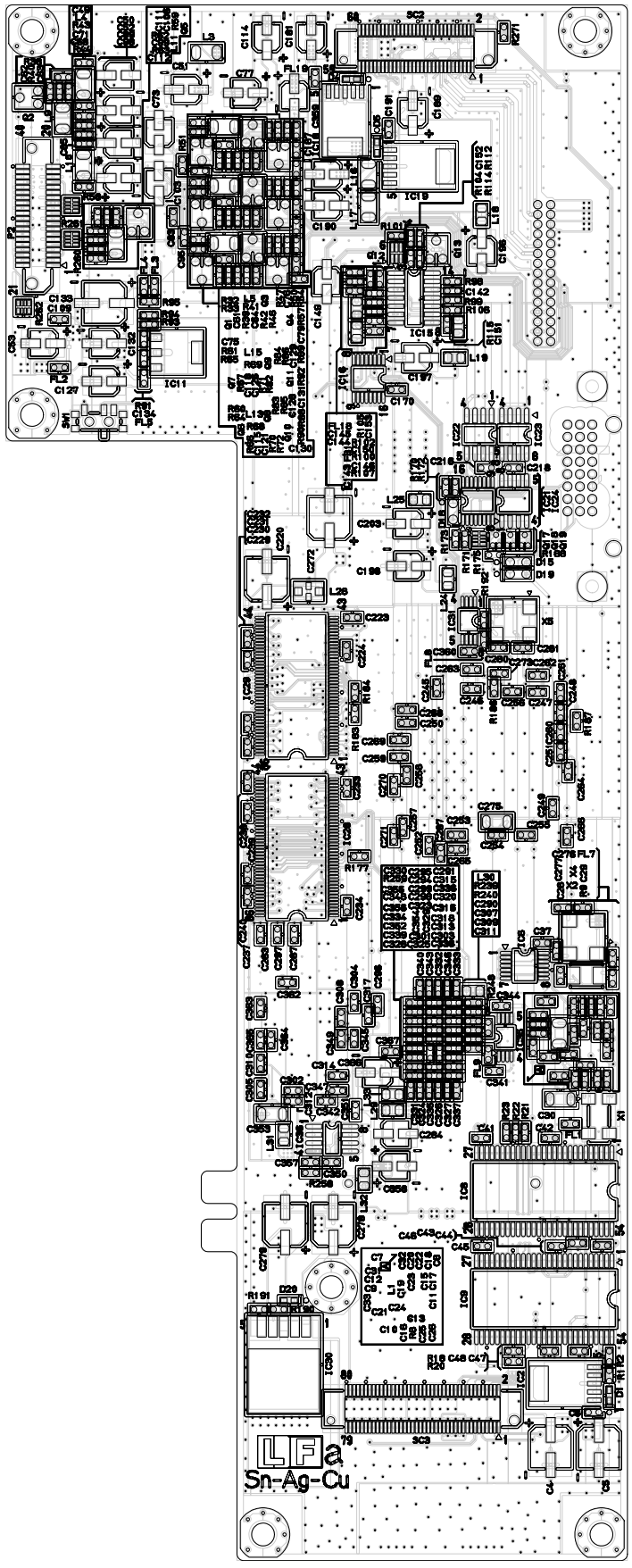
P.F.C CONTROL Unit (Side-B)
P.F.C-kontroll-Einheit (Seite-B)



LVPS CONTROL Unit (Side-B)
LVPS-kontroll-Einheit (Seite-B)



PC I/F Unit (Side-A)
PC-I/F-Einheit (Seite-A)



PC I/F Unit (Side-B)
PC-I/F-Einheit (Seite-B)

PARTS LIST

PARTS REPLACEMENT

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

HOW TO ORDER REPLACEMENT PARTS

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION
5. CODE
6. QUANTITY

in **USA**: Contact your nearest SHARP Parts Distributor. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

in **CANADA**: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100.

ERSATZTEILLISTE

AUSTAUSCH VON TEILEN

Ersatzteile, die besondere Sicherheitseigenschften haben, sind in dieser Anleitung markiert. Elektrische Komponenten mit solchen Eigenshaften sind in den Ersatzteil durch "⚠" gekenn-zeichnet. Der Gebrauch von Ersatzteilen, die nicht deselben Sicherheitseigenschaften haben wie die vom Hersteller empfohlenen ud in der Bedienungsanleitung angegebenen, können zur Ursache von Blitzeinschlägen, Bränden und anderen Gefahren werden.

WIE MAN ERSATSTEILE BESTELLT

Damit Ihre Bestellung promt und korrekt ausgeführt wird, geben Sie bitte folgende Informationen.

1. MODELL NR.
2. REF. NR.
3. ERSATZTEIL NR.
4. BESCHREIBUNG
5. KODE
6. QUANTITÄT

★ MARK: SPARE PARTS-DELIVERY SECTION

★ MARKIERUNG : ERSATZTEILE-LIEFERUNG

PRINTED WIRING BOARD ASSEMBLIES

Part No.	★	Description	Code
9NK5600204252	J	MAIN Unit	CK
9NK5600204253	J	FORMATTER Unit	CM
9NK5600204232	J	POWER Unit	BX
9NK5600204233	-	FILTER Unit	–
9NK5600204261	J	PC I/F Unit	
9NK5600204234	J	LVPS CONTROL Unit	AW
9NK5600204245	J	P.F.C CONTROL Unit	BB
9NK5600204255	-	AUDIO Unit	–
9NK5600204254	-	TERMINAL Unit	–
9NK5600204256	-	INDEX Unit	–
9NK5600204257	-	IR (Front) Unit	–
9NK5600204260	-	IR (Rear) Unit	–
9NK5600204258	-	KEYPAD Unit	–
9NK5600204263	J	LAMP1COVER Unit	AW
9NK5600204264	J	LAMP2 COVER Unit	AW

9NK5600204252
MAIN UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC1401	9NK2530239006	J	4-IN Stereo Audio Processor, TDA7440D	AP
IC1402	9NK2500047320	J	Regurator, PQ20WZ1UJ00H	AK
IC1403	9NK2530224474	J	Video SW With 6db AMP, NJM2245M	AM
IC1404	9NK2530224474	J	Video SW With 6db AMP, NJM2245M	AM
IC1405	9NK2530247007	J	Digital Echo Vioce Process, M65850FP	AQ
IC1406	9NK2530247007	J	Digital Echo Vioce Process, M65850FP	AQ
IC2601	9NK2600062507	J	Cmos Octal Buffer Non-Inv, 74AHC541PW	AF
IC2701	9NK2500052420	J	Regurator, PQ05DZ1UJ00H	AK
IC2702	9NK2510090120	J	Motor Driver, LB1831M	AL
IC2703	9NK2510311381	J	3Phase DC Motor CTL/ Driver, A8904SLB	
IC2704	9NK2500041320	J	Regurator, PQ12DZ1UJ00H	AK
IC2705	9NK2510139329	J	Reversible Motor Driver, BA6417F	AK
IC2706	9NK2500041320	J	Regurator, PQ12DZ1UJ00H	AK
IC2707	9NK2510139329	J	Reversible Motor Driver, BA6417F	
IC2708	9NK2600091808	J	Inverter Gate, SN74AHCT1G14DBVR	AC
IC2801	9NK2540154107	J	8Bit 12Ch D/A Converter, M62392FP	AQ
IC2802	9NK2540086207	J	8Bit I/O Expander, M62320FP	AL
IC2803	9NK2540086207	J	8Bit I/O Expander, M62320FP	AL
IC2804	9NK2540345516	J	8Bit I2C+Smbus I/O Port, PCA9557PW/G	AQ
IC2805	9NKP590600206	J	FET, HN1K03FU(F)	AE
IC2807	9NK2610188542	J	EEPROM 16K, AT24C16AN	AG
IC2808	9NK2600102134	J	2-Input And Gate, TC7SET08FU(F)	AE
IC2809	9NK2600102134	J	2-Input And Gate, TC7SET08FU(F)	AE
IC2810	9NK2610437413	J	EEPROM 32K*8, HN58X24256FPI	AT

9NK5600204252
MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
IC2811	9NK2600159208	J	2-In Or Gate, SN74LVC1G32DCKR	AD
IC2812	9NK2540086207	J	8Bit I/O Expander, M62320FP	AL
IC3501	9NK2620271059	J	10/100 FETH PHY, RTL8201CP	AQ
IC3601	9NK2600181108	J	Single Bus Buf Gate, SN74LVC1G125DCKR	AE
IC3602	9NK2600092007	J	2-Input And Gate, 74HCT08PWT	AD
IC3603	9NK2550018113	J	32Bit Risc Ucomputer, HD6417618BGN100V	BK
IC3604	9NK251038410H	J	System Reset, PST9229NR	AG
IC3605	9NK251038420H	J	System Reset, PST9012NR	AG
IC3606	9NK2600136608	J	D-Type Flip-Flop Clear Preset, SN74LVC2G74DCTR	AG
IC3607	9NK2600062507	J	Cmos Octal Buffer Non-Inv, 74AHC541PW	AF
IC3608	9NK2600134434	J	Dual Analog Switch, SN74LVC2G66DCTR	AE
IC3609	9NK2600102134	J	2-Input And Gate, TC7SET08FU(F)	AE
IC3610	9NKP590600206	J	FET, HN1K03FU(F)	AE
IC3801	9NK2610454960	J	Flash Memory 16M, MX29LV160BBTC	
IC3802	9NK2610369714	J	SDRAM 64M, K4S641632H- TC75000	BB
IC4501	9NK2540428051	J	Rs232 Line Dri/Rec, UPD4721GS	AT
IC5601	9NK2600102034	J	2-Input And Gate, TC7S08F(F)	AC
IC5602	9NK2600183108	J	Spdt SW 2:1 Analog Mux/ Demux, SN74LVC2G53DCTR	AG
IC7001	9NK2500047120	J	Regurator, PQ3DZ13U	AK
IC7002	9NK2500121220	J	Regurator, PQ015EZ01ZPH	AL
IC7003	9NK2500052420	J	Regurator, PQ05DZ1UJ00H	AK
IC7004	9NK2500041320	J	Regurator, PQ12DZ1UJ00H	AK
IC7005	9NK2500052420	J	Regurator, PQ05DZ1UJ00H	AK
IC7006	9NK2500276120	J	Regurator, PQ1R33	AH
IC7007	9NK2600092007	J	2-Input And Gate, 74HCT08PWT	AD
IC7008	9NK2500041320	J	Regurator, PQ12DZ1UJ00H	AK
IC7026	9NK2600147208	J	Dual 2-In Or Gate, SN74LVC2G32DCTR	AF
IC7201	9NK2500047320	J	Regurator, PQ20WZ1UJ00H	AK
IC7202	9NK2500047320	J	Regurator, PQ20WZ1UJ00H	AK
IC7203	9NK2500047320	J	Regurator, PQ20WZ1UJ00H	AK
IC7204	9NK2500047320	J	Regurator, PQ20WZ1UJ00H	AK
IC7205	9NK2540230032	J	H/W Monitor, W83782D	AS
IC7206	9NK2540230032	J	H/W Monitor, W83782D	AS
IC7207	9NK2500047320	J	Regurator, PQ20WZ1UJ00H	AK
IC7208	9NK2500047320	J	Regurator, PQ20WZ1UJ00H	AK
IC7209	9NK2510126133	J	EconoReset, DS1815R	AL

TRANSISTORS

Q1401	9NKM522000405	J	MMBT3904L	AB
Q1402	9NKM522000405	J	MMBT3904L	AB
Q1403	9NKM532500236	J	DTC144EUA	AB
Q1404	9NKM532500236	J	DTC144EUA	AB
Q2601	9NKM532500236	J	DTC144EUA	AB
Q2602	9NKM532500236	J	DTC144EUA	AB
Q2603	9NKM532500236	J	DTC144EUA	AB
Q2604	9NKM532500236	J	DTC144EUA	AB
Q2605	9NKM532500236	J	DTC144EUA	AB
Q2606	9NKM532500236	J	DTC144EUA	AB
Q2607	9NKM532500236	J	DTC144EUA	AB
Q2608	9NKM532500236	J	DTC144EUA	AB
Q2609	9NKM532500236	J	DTC144EUA	AB
Q2610	9NKM532500236	J	DTC144EUA	AB
Q2701	9NKM532500236	J	DTC144EUA	AB
Q2702	9NKM532500236	J	DTC144EUA	AB
Q3501	9NKM532500036	J	DTC114EUA	AB
Q3602	9NKM532500036	J	DTC114EUA	AB
Q7001	9NKM532500036	J	DTC114EUA	AB
Q7003	9NKM532500036	J	DTC114EUA	AB
Q7004	9NKM532500036	J	DTC114EUA	AB
Q7005	9NKM532500036	J	DTC114EUA	AB
Q7401	9NKP522500007	J	FET, 2N7002	
Q7402	9NKP522500007	J	FET, 2N7002	
Q7404	9NKN522000417	J	MMBT4403	AB
Q7405	9NKN522000417	J	MMBT4403	AB
Q7408	9NKP522500007	J	FET, 2N7002	
Q7409	9NKP522500007	J	FET, 2N7002	
Q7411	9NKN522000417	J	MMBT4403	AB
Q7412	9NKN522000417	J	MMBT4403	AB
Q7413	9NKP522500007	J	FET, 2N7002	
Q7414	9NKN522000417	J	MMBT4403	AB
Q7415	9NKP522500007	J	FET, 2N7002	
Q7416	9NKN522000417	J	MMBT4403	AB

DIODES

D2601	9NKI520080236	J	RB425D	AC
D2602	9NKI520080236	J	RB425D	AC
D2603	9NKI520080236	J	RB425D	AC
D2604	9NKI520080236	J	RB425D	AC
D2605	9NKI520080236	J	RB425D	AC
D2606	9NKK520800607	J	1PS226	AB
D2607	9NKK520800607	J	1PS226	AB
D2608	9NKK520800607	J	1PS226	AB
D2609	9NKK520800607	J	1PS226	AB
D2610	9NKK520800607	J	1PS226	AB
D2611	9NKI520080236	J	RB425D	AC
D2612	9NKI520080236	J	RB425D	AC
D2613	9NKI520080236	J	RB425D	AC
D2614	9NK0920990416	J	EV18N	AC
D2615	9NKI520080236	J	RB425D	AC
D2616	9NKK520800607	J	1PS226	AB
D2617	9NK0920990416	J	EV18N	AC
D2618	9NKK520800607	J	1PS226	AB
D2619	9NKK520800607	J	1PS226	AB
D2620	9NKK520800607	J	1PS226	AB
D2621	9NK0920990416	J	EV18N	AC
D2622	9NK0920990416	J	EV18N	AC
D2623	9NK0920990416	J	EV18N	AC
D2624	9NK0920990416	J	EV18N	AC
D2625	9NK0920990416	J	EV18N	AC
D2626	9NK0920990416	J	EV18N	AC
D2627	9NK0920990416	J	EV18N	AC
D2628	9NK0920990416	J	EV18N	AC
D2629	9NK0920990416	J	EV18N	AC
D2630	9NK0920990416	J	EV18N	AC
D2631	9NK0920990416	J	EV18N	AC
D2632	9NK0920990416	J	EV18N	AC
D2633	9NK0920990416	J	EV18N	AC
D2634	9NK0920990416	J	EV18N	AC
D2635	9NK0920990416	J	EV18N	AC
D2700	9NKH800860007	J	BYD37J	AD
D2701	9NKK520800036	J	DAN202K	AB
D2702	9NKI530060007	J	BAT54SW	AB
D2703	9NKI530060007	J	BAT54SW	AB
D2704	9NKK520800036	J	DAN202K	AB
D2705	9NKI530060007	J	BAT54SW	AB
D2706	9NKI530060007	J	BAT54SW	AB
D2707	9NKK520800036	J	DAN202K	AB
D2708	9NKH800860007	J	BYD37J	AD
D2709	9NKH800860007	J	BYD37J	AD
D2710	9NKH800860007	J	BYD37J	AD
D3501	9NKI520080236	J	RB425D	AC
D4501	9NKK520800607	J	1PS226	AB
D4502	9NKK520800607	J	1PS226	AB
D4503	9NKK520800607	J	1PS226	AB
D4504	9NKK520800607	J	1PS226	AB
D4505	9NKK520800036	J	DAN202K	AB
D4506	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D4507	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D4508	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D4509	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D7001	9NKK520800036	J	DAN202K	AB

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MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
D7002	9NKK520800036	J	DAN202K	AB
D7003	9NKK520800036	J	DAN202K	AB
D7004	9NKK520800036	J	DAN202K	AB
D7005	9NKK520800036	J	DAN202K	AB
D7006	9NKK520800036	J	DAN202K	AB
D7007	9NKK520800036	J	DAN202K	AB
D7201	9NKK520800036	J	DAN202K	AB
D7202	9NKK520800036	J	DAN202K	AB
D7203	9NKK520800036	J	DAN202K	AB
D7204	9NKK520800036	J	DAN202K	AB
D7205	9NKK520800036	J	DAN202K	AB
D7206	9NKK520800036	J	DAN202K	AB
D7208	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D7401	9NKK520750017	J	MMBD4148	AB
D7402	9NKK520750017	J	MMBD4148	AB
D7405	9NKK520750017	J	MMBD4148	AB
D7406	9NKK520750017	J	MMBD4148	AB
D7407	9NKK520750017	J	MMBD4148	AB
D7408	9NKK520750017	J	MMBD4148	AB

PACKAGED CIRCUITS

X3501	9NK0730281208	J	Crystal 25MHz	AE
X3601	9NK0730160612	J	Crystal 24.576MHz	AE
X3602	9NK0732140408	J	Oscillator 3.6864MHz	AN
X7201	9NK0732260208	J	Oscillator 14.318MHz	AL

COILS

L7201	9NK2921091427	J	Ferrite Bead	AB
L7202	9NK2921091427	J	Ferrite Bead	AB
L7203	9NK2816725880	J	Inductor, 22µH (M)	AF
L7204	9NK2816725880	J	Inductor, 22µH (M)	AF

CAPACITORS

C1401	9NK1547664000	J	0.47	16V	Ceramic	AB
C1402	9NK1547664000	J	0.47	16V	Ceramic	AB
C1403	9NK1547687100	J	2.2	16V	Ceramic	AB
C1404	9NK1547687100	J	2.2	16V	Ceramic	AB
C1405	9NK1517658000	J	0.1	50V	Ceramic	AB
C1406	9NK1517658000	J	0.1	50V	Ceramic	AB
C1407	9NK1547667100	J	1	16V	Ceramic	AB
C1408	9NK1547667100	J	1	16V	Ceramic	AB
C1409	9NK1517658000	J	0.1	50V	Ceramic	AB
C1410	9NK1547691200	J	10	16V	Ceramic	AB
C1411	9NK1512451000	J	5600p	50V	Ceramic	AB
C1412	9NK1512451000	J	5600p	50V	Ceramic	AB
C1413	9NK1517658000	J	0.1	50V	Ceramic	AB
C1414	9NK1517658000	J	0.1	50V	Ceramic	AB
C1415	9NKF144701433	J	47	25V	Electrolytic	AC
C1416	9NKF144701433	J	47	25V	Electrolytic	AC
C1417	9NK1517658000	J	0.1	50V	Ceramic	AB
C1418	9NK1547667100	J	1	16V	Ceramic	AB
C1419	9NK1517658000	J	0.1	50V	Ceramic	AB
C1420	9NK1547667100	J	1	16V	Ceramic	AB
C1421	9NK1547667100	J	1	16V	Ceramic	AB
C1422	9NK1547667100	J	1	16V	Ceramic	AB
C1423	9NK1512449000	J	4700p	50V	Ceramic	AB
C1424	9NK1511445000	J	1000p	50V	Ceramic	AB
C1425	9NK1557682000	J	0.068	25V	Ceramic	AB
C1426	9NK1517658000	J	0.1	50V	Ceramic	AB
C1427	9NK1517658000	J	0.1	50V	Ceramic	AB
C1428	9NK1517658000	J	0.1	50V	Ceramic	AB
C1429	9NKF144701433	J	47	25V	Electrolytic	AC
C1430	9NK1517658000	J	0.1	50V	Ceramic	AB
C1431	9NKF122201233	J	22	16V	Electrolytic	AB
C1432	9NK1557682000	J	0.068	25V	Ceramic	AB
C1433	9NK1511445000	J	1000p	50V	Ceramic	AB
C1434	9NK1512449000	J	4700p	50V	Ceramic	AB
C1435	9NK1547667100	J	1	16V	Ceramic	AB
C1436	9NK1547667100	J	1	16V	Ceramic	AB
C1437	9NK1547667100	J	1	16V	Ceramic	AB
C1438	9NK1512449000	J	4700p	50V	Ceramic	AB
C1439	9NK1511445000	J	1000p	50V	Ceramic	AB
C1440	9NK1557682000	J	0.068	25V	Ceramic	AB
C1441	9NK1517658000	J	0.1	50V	Ceramic	AB
C1442	9NK1517658000	J	0.1	50V	Ceramic	AB
C1443	9NK1517658000	J	0.1	50V	Ceramic	AB
C1444	9NK1517658000	J	0.1	50V	Ceramic	AB
C1445	9NKF122201233	J	22	16V	Electrolytic	AB
C1446	9NK1557682000	J	0.068	25V	Ceramic	AB
C1447	9NK1511445000	J	1000p	50V	Ceramic	AB
C1448	9NK1512449000	J	4700p	50V	Ceramic	AB
C1449	9NK1547667100	J	1	16V	Ceramic	AB
C2601	9NK1517658000	J	0.1	50V	Ceramic	AB
C2602	9NK1517658000	J	0.1	50V	Ceramic	AB
C2701	9NK1517658000	J	0.1	50V	Ceramic	AB
C2702	9NK1517658000	J	0.1	50V	Ceramic	AB
C2703	9NK1547691200	J	10	16V	Ceramic	AB
C2704	9NKF141001233	J	10	25V	Electrolytic	AC
C2705	9NK1547691200	J	10	16V	Ceramic	AB
C2706	9NK1512454000	J	0.01	50V	Ceramic	AB
C2707	9NKF141001233	J	10	25V	Electrolytic	AC
C2708	9NKF141001233	J	10	25V	Electrolytic	AC
C2709	9NK1517658000	J	0.1	50V	Ceramic	AB
C2710	9NK1512477000	J	2700p	50V	Ceramic	AB
C2711	9NK1517658000	J	0.1	50V	Ceramic	AB
C2712	9NK1512477000	J	2700p	50V	Ceramic	AB
C2713	9NK1512449000	J	4700p	50V	Ceramic	AB
C2714	9NK1547667100	J	1	16V	Ceramic	AB
C2715	9NK1511445000	J	1000p	50V	Ceramic	AB
C2716	9NK1517658000	J	0.1	50V	Ceramic	AB
C2717	9NK1511445000	J	1000p	50V	Ceramic	AB
C2718	9NK1543659000	J	0.22	16V	Ceramic	AB
C2719	9NK1511445000	J	1000p	50V	Ceramic	AB
C2720	9NK1512451000	J	5600p	50V	Ceramic	AB
C2721	9NK1512454000	J	0.01	50V	Ceramic	AB
C2722	9NK1547692000	J	0.15	16V	Ceramic	AB
C2723	9NKF141001233	J	10	25V	Electrolytic	AC
C2724	9NKF144701433	J	47	25V	Electrolytic	AC
C2725	9NK1512454000	J	0.01	50V	Ceramic	AB
C2726	9NK1512454000	J	0.01	50V	Ceramic	AB
C2727	9NKF141001233	J	10	25V	Electrolytic	AC
C2728	9NK1517658000	J	0.1	50V	Ceramic	AB
C2732	9NKF141001233	J	10	25V	Electrolytic	AC
C2733	9NKF144701433	J	47	25V	Electrolytic	AC
C2734	9NK1512454000	J	0.01	50V	Ceramic	AB
C2735	9NK1512454000	J	0.01	50V	Ceramic	AB
C2736	9NKF141001233	J	10	25V	Electrolytic	AC
C2737	9NK1517658000	J	0.1	50V	Ceramic	AB
C2801	9NK1517658000	J	0.1	50V	Ceramic	AB
C2802	9NK1517658000	J	0.1	50V	Ceramic	AB
C2803	9NK1517658000	J	0.1	50V	Ceramic	AB
C2804	9NK1517658000	J	0.1	50V	Ceramic	AB
C2805	9NK1517658000	J	0.1	50V	Ceramic	AB
C2806	9NK1517658000	J	0.1	50V	Ceramic	AB
C2807	9NKF141001233	J	10	25V	Electrolytic	AC
C2808	9NK1517658000	J	0.1	50V	Ceramic	AB
C2810	9NK1517658000	J	0.1	50V	Ceramic	AB
C2811	9NK1517658000	J	0.1	50V	Ceramic	AB
C2826	9NK1517658000	J	0.1	50V	Ceramic	AB
C3501	9NK1517658000	J	0.1	50V	Ceramic	AB
C3502	9NK1517658000	J	0.1	50V	Ceramic	AB
C3503	9NK1517658000	J	0.1	50V	Ceramic	AB
C3504	9NK1517658000	J	0.1	50V	Ceramic	AB
C3505	9NKF122201233	J	22	16V	Electrolytic	AB
C3506	9NK1517658000	J	0.1	50V	Ceramic	AB
C3507	9NK1517658000	J	0.1	50V	Ceramic	AB
C3508	9NK1547667100	J	1	16V	Ceramic	AB
C3509	9NK1517658000	J	0.1	50V	Ceramic	AB
C3510	9NKF122201233	J	22	16V	Electrolytic	AB
C3511	9NK1517658000	J	0.1	50V	Ceramic	AB
C3512	9NK1517658000	J	0.1	50V	Ceramic	AB
C3513	9NK1517658000	J	0.1	50V	Ceramic	AB
C3514	9NK1511514000	J	22p	50V	Ceramic	AB
C3515	9NK1511514000	J	22p	50V	Ceramic	AB
C3601	9NKF141001233	J	10	25V	Electrolytic	AC

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MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C3602	9NKF141001233	J	10	25V	Electrolytic	AC
C3603	9NK1517658000	J	0.1	50V	Ceramic	AB
C3604	9NK1517658000	J	0.1	50V	Ceramic	AB
C3605	9NK1517658000	J	0.1	50V	Ceramic	AB
C3606	9NK1517658000	J	0.1	50V	Ceramic	AB
C3607	9NK1517658000	J	0.1	50V	Ceramic	AB
C3608	9NK1517658000	J	0.1	50V	Ceramic	AB
C3609	9NK1517658000	J	0.1	50V	Ceramic	AB
C3610	9NK1517658000	J	0.1	50V	Ceramic	AB
C3611	9NK1517658000	J	0.1	50V	Ceramic	AB
C3612	9NK1517658000	J	0.1	50V	Ceramic	AB
C3613	9NK1517658000	J	0.1	50V	Ceramic	AB
C3614	9NK1517658000	J	0.1	50V	Ceramic	AB
C3615	9NK1517658000	J	0.1	50V	Ceramic	AB
C3616	9NK1517658000	J	0.1	50V	Ceramic	AB
C3617	9NK1517658000	J	0.1	50V	Ceramic	AB
C3618	9NK1517658000	J	0.1	50V	Ceramic	AB
C3619	9NK1517658000	J	0.1	50V	Ceramic	AB
C3620	9NK1517658000	J	0.1	50V	Ceramic	AB
C3621	9NK1517658000	J	0.1	50V	Ceramic	AB
C3622	9NK1517658000	J	0.1	50V	Ceramic	AB
C3623	9NK1511514000	J	22p	50V	Ceramic	AB
C3624	9NK1511514000	J	22p	50V	Ceramic	AB
C3625	9NK1517658000	J	0.1	50V	Ceramic	AB
C3626	9NK1517658000	J	0.1	50V	Ceramic	AB
C3627	9NK1542458000	J	0.1	16V	Ceramic	
C3628	9NK1517658000	J	0.1	50V	Ceramic	AB
C3629	9NK1511508000	J	10p	50V	Ceramic	AB
C3630	9NK1517658000	J	0.1	50V	Ceramic	AB
C3631	9NK1517658000	J	0.1	50V	Ceramic	AB
C3632	9NK1511538000	J	220p	50V	Ceramic	AB
C3633	9NK1511508000	J	10p	50V	Ceramic	AB
C3634	9NK1517658000	J	0.1	50V	Ceramic	AB
C3635	9NK1517658000	J	0.1	50V	Ceramic	AB
C3636	9NK1547667100	J	1	16V	Ceramic	AB
C3637	9NK1517658000	J	0.1	50V	Ceramic	AB
C3638	9NK1517658000	J	0.1	50V	Ceramic	AB
C3639	9NK1517658000	J	0.1	50V	Ceramic	AB
C3801	9NK1517658000	J	0.1	50V	Ceramic	AB
C3802	9NK1517658000	J	0.1	50V	Ceramic	AB
C3803	9NK1547667100	J	1	16V	Ceramic	AB
C3804	9NK1547667100	J	1	16V	Ceramic	AB
C3805	9NK1517658000	J	0.1	50V	Ceramic	AB
C3806	9NK1517658000	J	0.1	50V	Ceramic	AB
C3807	9NK1517658000	J	0.1	50V	Ceramic	AB
C3808	9NK1517658000	J	0.1	50V	Ceramic	AB
C3809	9NK1517658000	J	0.1	50V	Ceramic	AB
C3810	9NK1517658000	J	0.1	50V	Ceramic	AB
C3811	9NK1517658000	J	0.1	50V	Ceramic	AB
C4501	9NKF152281033	J	2.2	35V	Electrolytic	AB
C4502	9NKF152281033	J	2.2	35V	Electrolytic	AB
C4503	9NK1517658000	J	0.1	50V	Ceramic	AB
C4504	9NKF152281033	J	2.2	35V	Electrolytic	AB
C4505	9NKF152281033	J	2.2	35V	Electrolytic	AB
C4506	9NKF152281033	J	2.2	35V	Electrolytic	AB
C5601	9NK1517658000	J	0.1	50V	Ceramic	AB
C5602	9NK1517658000	J	0.1	50V	Ceramic	AB
C7001	9NK1517658000	J	0.1	50V	Ceramic	AB
C7002	9NK1517658000	J	0.1	50V	Ceramic	AB
C7003	9NKF141001233	J	10	25V	Electrolytic	AC
C7004	9NKF121011333	J	100	16V	Electrolytic	AC
C7005	9NK1517658000	J	0.1	50V	Ceramic	AB
C7006	9NKF122201233	J	22	16V	Electrolytic	AB
C7007	9NKF121011333	J	100	16V	Electrolytic	AC
C7008	9NK1517658000	J	0.1	50V	Ceramic	AB
C7009	9NKF144701433	J	47	25V	Electrolytic	AC
C7010	9NKF121011333	J	100	16V	Electrolytic	AC
C7011	9NK1517658000	J	0.1	50V	Ceramic	AB
C7012	9NKF144701433	J	47	25V	Electrolytic	AC
C7013	9NKF141001233	J	10	25V	Electrolytic	AC
C7014	9NK1517658000	J	0.1	50V	Ceramic	AB
C7015	9NK1517658000	J	0.1	50V	Ceramic	AB
C7016	9NK1517658000	J	0.1	50V	Ceramic	AB
C7017	9NK1517658000	J	0.1	50V	Ceramic	AB
C7019	9NKF141001233	J	10	25V	Electrolytic	AC
C7020	9NKF121011333	J	100	16V	Electrolytic	AC
C7021	9NKF144701433	J	47	25V	Electrolytic	AC
C7022	9NK1517658000	J	0.1	50V	Ceramic	AB
C7024	9NKF141001233	J	10	25V	Electrolytic	AC
C7025	9NK1517658000	J	0.1	50V	Ceramic	AB
C7026	9NK1517658000	J	0.1	50V	Ceramic	AB
C7201	9NKF121011333	J	100	16V	Electrolytic	AC
C7202	9NKF144701433	J	47	25V	Electrolytic	AC
C7203	9NKF144701433	J	47	25V	Electrolytic	AC
C7204	9NKF144701433	J	47	25V	Electrolytic	AC
C7205	9NKF144701433	J	47	25V	Electrolytic	AC
C7206	9NK1517658000	J	0.1	50V	Ceramic	AB
C7207	9NK1547691200	J	10	16V	Ceramic	AB
C7212	9NK1517658000	J	0.1	50V	Ceramic	AB
C7213	9NK1547691200	J	10	16V	Ceramic	AB
C7214	9NKF141001233	J	10	25V	Electrolytic	AC
C7215	9NK1517658000	J	0.1	50V	Ceramic	AB
C7216	9NKF121011333	J	100	16V	Electrolytic	AC
C7217	9NKF121011333	J	100	16V	Electrolytic	AC
C7218	9NKF121011333	J	100	16V	Electrolytic	AC
C7219	9NK1517658000	J	0.1	50V	Ceramic	AB
C7220	9NK1517658000	J	0.1	50V	Ceramic	AB
C7221	9NKF141001233	J	10	25V	Electrolytic	AC
C7222	9NKF121011333	J	100	16V	Electrolytic	AC
C7223	9NK1517658000	J	0.1	50V	Ceramic	AB
C7226	9NK1517658000	J	0.1	50V	Ceramic	AB
C7227	9NKF121011333	J	100	16V	Electrolytic	AC
C7228	9NK1547691200	J	10	16V	Ceramic	AB
C7229	9NKF141001233	J	10	25V	Electrolytic	AC
C7230	9NK1517658000	J	0.1	50V	Ceramic	AB
C7231	9NKF121011333	J	100	16V	Electrolytic	AC
C7232	9NK1517658000	J	0.1	50V	Ceramic	AB
C7233	9NK1511530000	J	100p	50V	Ceramic	AB
C7234	9NK1517658000	J	0.1	50V	Ceramic	AB
C7401	9NKF121011333	J	100	16V	Electrolytic	AC
C7402	9NKF121011333	J	100	16V	Electrolytic	AC
C7403	9NKF141001233	J	10	25V	Electrolytic	AC
C7404	9NKF121011333	J	100	16V	Electrolytic	AC
C7405	9NKF121011333	J	100	16V	Electrolytic	AC
C7406	9NK1517658000	J	0.1	50V	Ceramic	AB
C7407	9NK1511530000	J	100p	50V	Ceramic	AB
C7408	9NK1511530000	J	100p	50V	Ceramic	AB
C7410	9NK1517658000	J	0.1	50V	Ceramic	AB
C7411	9NK1517658000	J	0.1	50V	Ceramic	AB
C7414	9NKF121011333	J	100	16V	Electrolytic	AC
C7415	9NKF121011333	J	100	16V	Electrolytic	AC
C7417	9NKF121011333	J	100	16V	Electrolytic	AC
C7418	9NKF121011333	J	100	16V	Electrolytic	AC
C7420	9NK1511530000	J	100p	50V	Ceramic	AB
C7421	9NK1511530000	J	100p	50V	Ceramic	AB
C7423	9NK1517658000	J	0.1	50V	Ceramic	AB
C7424	9NK1517658000	J	0.1	50V	Ceramic	AB
C7425	9NKF121011333	J	100	16V	Electrolytic	AC
C7426	9NKF121011333	J	100	16V	Electrolytic	AC
C7427	9NK1517658000	J	0.1	50V	Ceramic	AB
C7428	9NK1511530000	J	100p	50V	Ceramic	AB
C7429	9NKF121011333	J	100	16V	Electrolytic	AC
C7430	9NKF121011333	J	100	16V	Electrolytic	AC
C7431	9NK1511530000	J	100p	50V	Ceramic	AB
C7432	9NK1517658000	J	0.1	50V	Ceramic	AB
C7501	9NK1517658000	J	0.1	50V	Ceramic	AB
C7502	9NK1517658000	J	0.1	50V	Ceramic	AB

RESISTORS

R1401	9NK0343562300	J	5.6k	1/10W	Metal Oxide	AB
R1402	9NK0343562300	J	5.6k	1/10W	Metal Oxide	AB
R1403	9NK0341069300	J	27k	1/10W	Metal Oxide	AB
R1404	9NK0341172300	J	7.32k	1/10W	Metal Oxide	AB
R1405	9NK0341256300	J	3k	1/10W	Metal Oxide	AB
R1408	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R1409	9NK0341059300	J	10k	1/10W	Metal Oxide	AB

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MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
R1410	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R1411	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1412	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1413	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1414	9NK0343473300	J	47k	1/10W	Metal Oxide	AB
R1415	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1416	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1417	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1418	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R1419	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R1420	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R1421	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1422	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1423	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1424	9NK0343473300	J	47k	1/10W	Metal Oxide	AB
R1425	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1426	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1427	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1428	9NK0333000500	J	0	1W	Metal Oxide	AB
R1430	9NK0341061300	J	12k	1/10W	Metal Oxide	AB
R1431	9NK0341077300	J	47k	1/10W	Metal Oxide	AB
R1432	9NK0341065300	J	18k	1/10W	Metal Oxide	AB
R1433	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2601	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2602	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2603	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2605	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2606	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2607	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2608	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2609	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2610	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2611	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2617	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2618	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2619	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2620	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2621	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2622	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2623	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2624	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2625	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2626	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2627	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2628	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2629	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2701	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2702	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2703	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2704	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2705	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2706	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2707	9NK0333568500	J	5.6	1W	Metal Oxide	AB
R2708	9NK0333568500	J	5.6	1W	Metal Oxide	AB
R2709	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2710	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2711	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2712	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2713	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2714	9NK0313151000	J	150	1/4W	Metal Oxide	AB
R2715	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2716	9NK0313151000	J	150	1/4W	Metal Oxide	AB
R2717	9NK0313151000	J	150	1/4W	Metal Oxide	AB
R2718	9NK0343305300	J	3M	1/10W	Metal Oxide	AB
R2719	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2720	9NK0313108000	J	1	1/4W	Metal Oxide	AB
R2721	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2723	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2725	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2726	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2727	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2728	9NK0313108000	J	1	1/4W	Metal Oxide	AB
R2729	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2731	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2733	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2735	9NK0333000500	J	0	1W	Metal Oxide	AB
R2736	9NK0333000500	J	0	1W	Metal Oxide	AB
R2737	9NK0333000500	J	0	1W	Metal Oxide	AB
R2738	9NK0333478500	J	4.7	1W	Metal Oxide	AC
R2739	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2741	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2742	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2743	9NK0333478500	J	4.7	1W	Metal Oxide	AC
R2744	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2746	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2747	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2748	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R2749	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R2750	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R2751	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R2753	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2754	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2755	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2756	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2757	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2758	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2759	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R2760	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2761	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R2762	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R2763	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2764	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2765	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R2801	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2802	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2803	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2804	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2805	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2806	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2807	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2808	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2809	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2810	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2811	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2812	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2813	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2815	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2816	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2818	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2820	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2821	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2822	9NK0343182300	J	1.8k	1/10W	Metal Oxide	AB
R2824	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2826	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2827	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2828	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2830	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2832	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2833	9NK0341047300	J	2.7k	1/10W	Metal Oxide	AB
R2834	9NK0343122300	J	1.2k	1/10W	Metal Oxide	AB
R2835	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2836	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2837	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2838	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2839	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2840	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2841	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2842	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2843	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2844	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2845	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2846	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2847	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2848	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2849	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2850	9NK0343101300	J	100	1/10W	Metal Oxide	AB

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Ref. No.	Part No.	★			Description	Code
R2851	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2852	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2853	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2854	9NK0341067300	J	22k	1/10W	Metal Oxide	AB
R2855	9NK0341067300	J	22k	1/10W	Metal Oxide	AB
R2857	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2858	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2859	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2860	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2861	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2864	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2865	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2866	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2868	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2869	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2870	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2871	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2872	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2873	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2874	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2875	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2876	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2877	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2878	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2879	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2880	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R2881	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R2882	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2883	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2884	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2885	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R2886	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2887	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2888	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2889	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2890	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2891	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2892	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2893	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R2894	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2895	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3501	9NK0341424300	J	51	1/10W	Metal Oxide	AB
R3502	9NK0341424300	J	51	1/10W	Metal Oxide	AB
R3503	9NK0341424300	J	51	1/10W	Metal Oxide	AB
R3504	9NK0341424300	J	51	1/10W	Metal Oxide	AB
R3508	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3509	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3510	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3511	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3515	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3516	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3517	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3518	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3519	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3520	9NK0343470300	J	47	1/10W	Metal Oxide	AB
R3521	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3522	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3523	9NK0619900305	J	47	1/16W	Chip Array	AB
R3524	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3525	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3526	9NK0343470300	J	47	1/10W	Metal Oxide	AB
R3527	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3528	9NK0343202300	J	2k	1/10W	Metal Oxide	AB
R3530	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3531	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3532	9NK0343470300	J	47	1/10W	Metal Oxide	AB
R3533	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R3534	9NK0619900305	J	47	1/16W	Chip Array	AB
R3535	9NK0619900305	J	47	1/16W	Chip Array	AB
R3536	9NK0343470300	J	47	1/10W	Metal Oxide	AB
R3537	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3538	9NK0619900705	J	10k	1/16W	Chip Array	AB
R3539	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3541	9NK0343562300	J	5.6k	1/10W	Metal Oxide	AB
R3542	9NK0343562300	J	5.6k	1/10W	Metal Oxide	AB
R3544	9NK0343470300	J	47	1/10W	Metal Oxide	AB
R3545	9NK0343470300	J	47	1/10W	Metal Oxide	AB
R3546	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3547	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R3601	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3602	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3603	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3604	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3605	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3606	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3607	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3608	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3609	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3610	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R3611	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R3612	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3613	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R3614	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3615	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3616	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3617	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R3618	9NK0619903205	J	0	1/16W	Chip Array	AB
R3619	9NK0619903205	J	0	1/16W	Chip Array	AB
R3620	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R3621	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3623	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3624	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3627	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3628	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3630	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3631	9NK0619903205	J	0	1/16W	Chip Array	AB
R3632	9NK0619903205	J	0	1/16W	Chip Array	AB
R3637	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3638	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3639	9NK0619903205	J	0	1/16W	Chip Array	AB
R3640	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3641	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3643	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3644	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3646	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3647	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3648	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3651	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3652	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3653	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3654	9NK0619903205	J	0	1/16W	Chip Array	AB
R3655	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3657	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3660	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3661	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3663	9NK0619903205	J	0	1/16W	Chip Array	AB
R3664	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3665	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3667	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3669	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3670	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3671	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3672	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3673	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3678	9NK0619903205	J	0	1/16W	Chip Array	AB
R3680	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3682	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3683	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R3685	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3686	9NK0619903205	J	0	1/16W	Chip Array	AB
R3687	9NK0341087300	J	100k	1/10W	Metal Oxide	AB
R3689	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3690	9NK0341087300	J	100k	1/10W	Metal Oxide	AB
R3691	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3692	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3693	9NK0343000300	J	0	1/10W	Metal Oxide	AB

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Ref. No.	Part No.	★	Description	Code
R3694	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3696	9NK0341087300	J	100k 1/10W Metal Oxide	AB
R3697	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3698	9NK0341087300	J	100k 1/10W Metal Oxide	AB
R3699	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3700	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3702	9NK0341087300	J	100k 1/10W Metal Oxide	AB
R3704	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3706	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3707	9NK0343470300	J	47 1/10W Metal Oxide	AB
R3708	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3709	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3710	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R3711	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3712	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R3713	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R3714	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R3716	9NK0343472300	J	4.7k 1/10W Metal Oxide	AB
R3717	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3718	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3719	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3720	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3721	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3722	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R3723	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3724	9NK0343100300	J	10 1/10W Metal Oxide	AB
R3726	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3727	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3728	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3729	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3731	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3733	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3734	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3735	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3736	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3737	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3738	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3739	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3740	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3741	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3742	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3743	9NK0343100300	J	10 1/10W Metal Oxide	AB
R3744	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3745	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3746	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3747	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3748	9NK0343470300	J	47 1/10W Metal Oxide	AB
R3749	9NK0343100300	J	10 1/10W Metal Oxide	AB
R3750	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3751	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3752	9NK0341071300	J	33k 1/10W Metal Oxide	AB
R3753	9NK0343393300	J	39k 1/10W Metal Oxide	AB
R3754	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3755	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3756	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3757	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3758	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3759	9NK0343101300	J	100 1/10W Metal Oxide	AB
R3801	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3802	9NK0343472300	J	4.7k 1/10W Metal Oxide	AB
R3803	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3804	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3805	9NK0343472300	J	4.7k 1/10W Metal Oxide	AB
R3806	9NK0343472300	J	4.7k 1/10W Metal Oxide	AB
R3807	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3808	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3809	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3810	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3811	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3812	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3813	9NK0343000300	J	0 1/10W Metal Oxide	AB
R3814	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3816	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R3817	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R4501	9NK0343000300	J	0 1/10W Metal Oxide	AB
R4502	9NK0343000300	J	0 1/10W Metal Oxide	AB
R4503	9NK0343000300	J	0 1/10W Metal Oxide	AB
R4504	9NK0343000300	J	0 1/10W Metal Oxide	AB
R4505	9NK0343000300	J	0 1/10W Metal Oxide	AB
R4507	9NK0343000300	J	0 1/10W Metal Oxide	AB
R4508	9NK0341048300	J	3.3k 1/10W Metal Oxide	AB
R4510	9NK0343000300	J	0 1/10W Metal Oxide	AB
R4511	9NK0343101300	J	100 1/10W Metal Oxide	AB
R4512	9NK0343101300	J	100 1/10W Metal Oxide	AB
R4513	9NK0333338500	J	3.3 1W Metal Oxide	AB
R4514	9NK0333338500	J	3.3 1W Metal Oxide	AB
R4515	9NK0343393300	J	39k 1/10W Metal Oxide	AB
R4516	9NK0343393300	J	39k 1/10W Metal Oxide	AB
R4517	9NK0343000300	J	0 1/10W Metal Oxide	AB
R5601	9NK0343000300	J	0 1/10W Metal Oxide	AB
R5602	9NK0343472300	J	4.7k 1/10W Metal Oxide	AB
R7002	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7003	9NK0343000300	J	0 1/10W Metal Oxide	AB
R7006	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7007	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7008	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7012	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7013	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7014	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7015	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7016	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7018	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7020	9NK0343101300	J	100 1/10W Metal Oxide	AB
R7021	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7022	9NK0343101300	J	100 1/10W Metal Oxide	AB
R7023	9NK0343000300	J	0 1/10W Metal Oxide	AB
R7024	9NK0343101300	J	100 1/10W Metal Oxide	AB
R7025	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7027	9NK0343101300	J	100 1/10W Metal Oxide	AB
R7028	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7029	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7030	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7033	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7034	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7035	9NK0343102300	J	1k 1/10W Metal Oxide	AB
R7036	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7037	9NK0341062300	J	15k 1/10W Metal Oxide	AB
R7038	9NK0341062300	J	15k 1/10W Metal Oxide	AB
R7039	9NK0343101300	J	100 1/10W Metal Oxide	AB
R7040	9NK0343101300	J	100 1/10W Metal Oxide	AB
R7041	9NK0343101300	J	100 1/10W Metal Oxide	AB
R7042	9NK0333000500	J	0 1W Metal Oxide	AB
R7043	9NK0333000500	J	0 1W Metal Oxide	AB
R7201	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7202	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7203	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7204	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7205	9NK0341067300	J	22k 1/10W Metal Oxide	AB
R7206	9NK0341067300	J	22k 1/10W Metal Oxide	AB
R7207	9NK0341061300	J	12k 1/10W Metal Oxide	AB
R7208	9NK0341061300	J	12k 1/10W Metal Oxide	AB
R7209	9NK0341071300	J	33k 1/10W Metal Oxide	AB
R7210	9NK0341071300	J	33k 1/10W Metal Oxide	AB
R7211	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7212	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7213	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7214	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7215	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7216	9NK0313108000	J	1 1/4W Metal Oxide	AB
R7217	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7218	9NK0341067300	J	22k 1/10W Metal Oxide	AB
R7219	9NK0341061300	J	12k 1/10W Metal Oxide	AB
R7220	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7221	9NK0341071300	J	33k 1/10W Metal Oxide	AB
R7222	9NK0341067300	J	22k 1/10W Metal Oxide	AB
R7223	9NK0341059300	J	10k 1/10W Metal Oxide	AB
R7224	9NK0341061300	J	12k 1/10W Metal Oxide	AB

9NK5600204252

MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
R7225	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7226	9NK0341071300	J	33k	1/10W	Metal Oxide	AB
R7227	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7228	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7229	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7230	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7231	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7232	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7233	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7236	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R7238	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7239	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7240	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7242	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7243	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7244	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7245	9NK0341075300	J	40.2k	1/10W	Metal Oxide	AB
R7246	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7248	9NK0341075300	J	40.2k	1/10W	Metal Oxide	AB
R7249	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7254	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7255	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R7257	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7258	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R7259	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7260	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7261	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R7262	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R7263	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R7264	9NK0341518300	J	18.7k	1/10W	Metal Oxide	AB
R7265	9NK0343330300	J	33	1/10W	Metal Oxide	AB
R7267	9NK0343330300	J	33	1/10W	Metal Oxide	AB
R7269	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7270	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7274	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R7276	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7277	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7278	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7279	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7280	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7281	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7282	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7283	9NK0341075300	J	40.2k	1/10W	Metal Oxide	AB
R7284	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7286	9NK0341075300	J	40.2k	1/10W	Metal Oxide	AB
R7287	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7290	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R7292	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7293	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R7295	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7296	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R7297	9NK0341172300	J	7.32k	1/10W	Metal Oxide	AB
R7298	9NK0341261300	J	2.05k	1/10W	Metal Oxide	AB
R7299	9NK0341172300	J	7.32k	1/10W	Metal Oxide	AB
R7300	9NK0341261300	J	2.05k	1/10W	Metal Oxide	AB
R7301	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7302	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7303	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R7304	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R7305	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R7306	9NK0343330300	J	33	1/10W	Metal Oxide	AB
R7307	9NK0343330300	J	33	1/10W	Metal Oxide	AB
R7308	9NK0341518300	J	18.7k	1/10W	Metal Oxide	AB
R7309	9NK0343563300	J	56k	1/10W	Metal Oxide	AB
R7312	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7314	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7318	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7323	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7324	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7325	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7330	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R7331	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R7333	9NK0343563300	J	56k	1/10W	Metal Oxide	AB
R7334	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7339	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7401	9NK0343511300	J	510	1/10W	Metal Oxide	AB
R7402	9NK0343511300	J	510	1/10W	Metal Oxide	AB
R7406	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7407	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R7408	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7409	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R7412	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7413	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7414	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7415	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7418	9NK0341069300	J	27k	1/10W	Metal Oxide	AB
R7419	9NK0341069300	J	27k	1/10W	Metal Oxide	AB
R7424	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7425	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7428	9NK0343511300	J	510	1/10W	Metal Oxide	AB
R7429	9NK0343511300	J	510	1/10W	Metal Oxide	AB
R7434	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7435	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R7436	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7437	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R7440	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7441	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7442	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7443	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7445	9NK0341069300	J	27k	1/10W	Metal Oxide	AB
R7447	9NK0341069300	J	27k	1/10W	Metal Oxide	AB
R7451	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7452	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7453	9NK0343511300	J	510	1/10W	Metal Oxide	AB
R7454	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7455	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R7456	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7458	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7459	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7460	9NK0341069300	J	27k	1/10W	Metal Oxide	AB
R7462	9NK0343511300	J	510	1/10W	Metal Oxide	AB
R7463	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7464	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R7465	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R7467	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R7468	9NK0341069300	J	27k	1/10W	Metal Oxide	AB
R7469	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7501	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R7507	9NK0343000300	J	0	1/10W	Metal Oxide	AB

SWITCHES

S3601	9NK3000700435	J	Switch	AK
S3602	9NK3000901620	J	Switch	AE
S7001	9NK3000700435	J	Switch	AK

MISCELLANEOUS PARTS

FB1401	9NK2921174612	J	Ferrite Bead	AB
FB1402	9NK2921174612	J	Ferrite Bead	AB
FB1403	9NK2921174612	J	Ferrite Bead	AB
FB2601	9NK2921174612	J	Ferrite Bead	AB
FB2701	9NK2921174612	J	Ferrite Bead	AB
FB2802	9NK2921174612	J	Ferrite Bead	AB
FB2803	9NK2921174612	J	Ferrite Bead	AB
FB3501	9NK2921174612	J	Ferrite Bead	AB
FB3502	9NK2921174612	J	Ferrite Bead	AB
FB3503	9NK2921174612	J	Ferrite Bead	AB
FB3601	9NK2921174612	J	Ferrite Bead	AB
FB3602	9NK2921174612	J	Ferrite Bead	AB
FB3603	9NK2921174612	J	Ferrite Bead	AB
FB3801	9NK2921174612	J	Ferrite Bead	AB
FB3802	9NK2921174612	J	Ferrite Bead	AB
FB4501	9NK2921174612	J	Ferrite Bead	AB
FB5601	9NK2921174612	J	Ferrite Bead	AB
FB5602	9NK2921174612	J	Ferrite Bead	AB
FB7001	9NK2921174612	J	Ferrite Bead	AB
FB7002	9NK2921174612	J	Ferrite Bead	AB

Ref. No.	Part No.	★	Description	Code
FB7004	9NK2921174612	J	Ferrite Bead	AB
FB7005	9NK2921174612	J	Ferrite Bead	AB
FB7201	9NK2921174612	J	Ferrite Bead	AB
FB7202	9NK2921174612	J	Ferrite Bead	AB
FB7203	9NK2921174612	J	Ferrite Bead	AB
FB7204	9NK2921174612	J	Ferrite Bead	AB
FB7205	9NK2921174612	J	Ferrite Bead	AB
FB7206	9NK2921174612	J	Ferrite Bead	AB
FB7207	9NK2921174612	J	Ferrite Bead	AB
FB7208	9NK2921174612	J	Ferrite Bead	AB
FB7209	9NK2921113712	J	Ferrite Bead	AB
FB7210	9NK2921113712	J	Ferrite Bead	AB
FB7211	9NK2921113712	J	Ferrite Bead	AB
FB7212	9NK2921113712	J	Ferrite Bead	AB
FB7213	9NK2921113712	J	Ferrite Bead	AB
FB7214	9NK2921113712	J	Ferrite Bead	AB
FB7215	9NK2921113712	J	Ferrite Bead	AB
FB7217	9NK2921174612	J	Ferrite Bead	AB
FB7401	9NK2921113712	J	Ferrite Bead	AB
FB7402	9NK2921113712	J	Ferrite Bead	AB
FB7403	9NK2921113712	J	Ferrite Bead	AB
FB7404	9NK2921113712	J	Ferrite Bead	AB
FB7409	9NK2921113712	J	Ferrite Bead	AB
FB7410	9NK2921113712	J	Ferrite Bead	AB
FB7411	9NK2921113712	J	Ferrite Bead	AB
FB7412	9NK2921113712	J	Ferrite Bead	AB
FB7413	9NK2921113712	J	Ferrite Bead	AB
FB7414	9NK2921113712	J	Ferrite Bead	AB
FB7415	9NK2921113712	J	Ferrite Bead	AB
FB7416	9NK2921113712	J	Ferrite Bead	AB
FB7417	9NK2921113712	J	Ferrite Bead	AB
FB7418	9NK2921113712	J	Ferrite Bead	AB
FB7419	9NK2921113712	J	Ferrite Bead	AB
FB7420	9NK2921113712	J	Ferrite Bead	AB
FB7421	9NK2921113712	J	Ferrite Bead	AB
FB7422	9NK2921113712	J	Ferrite Bead	AB
FB7501	9NK2921174612	J	Ferrite Bead	AB
CN1401	9NK3070070600	J	Connector, 9Pin	AF
CN2601	9NK3071587866	J	Connector, 12Pin	AG
CN2602	9NK3071587766	J	Connector, 10Pin	AF
CN2700	9NK3071297134	J	Connector, 5Pin	AB
CN2702	9NK3071297234	J	Connector, 6Pin	AC
CN2703	9NK3075416028	J	Conn Connector, 4Pin	AE
CN2704	9NK3071297034	J	Connector, 4Pin	AB
CN2801	9NK3070070200	J	Connector, 2Pin	AD
CN2802	9NK3070070200	J	Connector, 2Pin	AD
CN3601	9NK3070070900	J	Connector, 6Pin	AE
CN5601	9NK3071296934	J	Connector, 3Pin	AB
CN5602	9NK3071296934	J	Connector, 3Pin	AB
CN7001	9NK3070070200	J	Connector, 2Pin	AD
CN7004	9NK3070070100	J	Connector, 5Pin	AE
CN7005	9NK3070070900	J	Connector, 6Pin	AE
CN7201	9NK3070070900	J	Connector, 6Pin	AE
CN7203	9NK3070070100	J	Connector, 5Pin	AE
CN7204	9NK3070070800	J	Connector, 3Pin	AD
CN7205	9NK3070070200	J	Connector, 2Pin	AD
CN7401	9NK3070070528	J	Connector, 4Pin	AE
CN7402	9NK3070070528	J	Connector, 4Pin	AE
CN7403	9NK3070070800	J	Connector, 3Pin	AD
CN7404	9NK3070070528	J	Connector, 4Pin	AE
CN7405	9NK3070070800	J	Connector, 3Pin	AD
CN7406	9NK3070070800	J	Connector, 3Pin	AD
CN7501	9NK3070070200	J	Connector, 2Pin	AD
CN8001	9NK3070349027	J	Connector, 80Pin	AY
CN8002	9NK3070349127	J	Connector, 60Pin	AX

9NK5600204252
MAIN UNIT (Continued)

9NK5600204253
FORMATTER UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC9001	9NK2600168008	J	Frequency DRCG, CDCR83DBQR	AX
IC9003	9NK2633005608	J	ASDLP, 2501963-5	BY
IC9004	9NK2610365832	J	Flash Memory, AM29LV800BB	AX
IC9006	9NK2610555214	J	D-RDRAM 256K, K4R271669F	BG
IC9007	9NK2500058937	J	Regurator, AIC1117	AE
IC9301	9NK2510264114	J	DMD Power and Reset Driver	BR

DIODES

Ref. No.	Part No.	★	Description	Code
D9301	9NKI820870037	J	SFPB-76	AF
D9302	9NKI820870037	J	SFPB-76	AF
D9303	9NKJ823180036	J	Zener Diode PDZ-8.2B	AE

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
X9001	9NK0732340208	J	Oscillator 100MHz	AS
X9002	9NK0732310208	J	Oscillator 60MHz	AP

COILS

Ref. No.	Part No.	★	Description	Code
L9301	9NK2816725880	J	Inductor, 22µH (M)	AF
L9302	9NK2816725880	J	Inductor, 22µH (M)	AF

CAPACITORS

Ref. No.	Part No.	★				Code
C9001	9NKF121001133	J	10	16V	Electrolytic	AB
C9002	9NK1517658000	J	0.1	50V	Ceramic	AB
C9003	9NK1517658000	J	0.1	50V	Ceramic	AB
C9004	9NK1517658000	J	0.1	50V	Ceramic	AB
C9006	9NK1517658000	J	0.1	50V	Ceramic	AB
C9007	9NK1517658000	J	0.1	50V	Ceramic	AB
C9008	9NK1511526000	J	68p	50V	Ceramic	AB
C9009	9NK1517658000	J	0.1	50V	Ceramic	AB
C9010	9NK1511526000	J	68p	50V	Ceramic	AB
C9011	9NK1517658000	J	0.1	50V	Ceramic	AB
C9013	9NK1517658000	J	0.1	50V	Ceramic	AB
C9014	9NK1517658000	J	0.1	50V	Ceramic	AB
C9015	9NK1517658000	J	0.1	50V	Ceramic	AB
C9016	9NK1517658000	J	0.1	50V	Ceramic	AB
C9019	9NKF121011333	J	100	16V	Electrolytic	AC
C9021	9NK1517658000	J	0.1	50V	Ceramic	AB
C9022	9NKF121001133	J	10	16V	Electrolytic	AB
C9023	9NK1517658000	J	0.1	50V	Ceramic	AB
C9024	9NK1511526000	J	68p	50V	Ceramic	AB
C9025	9NK1517658000	J	0.1	50V	Ceramic	AB
C9026	9NK1511526000	J	68p	50V	Ceramic	AB
C9027	9NK1517658000	J	0.1	50V	Ceramic	AB
C9028	9NKF161081133	J	1	50V	Electrolytic	AB
C9029	9NK1517658000	J	0.1	50V	Ceramic	AB
C9030	9NK151450B002	J	3.9p	50V	Ceramic	AB
C9032	9NK1517658000	J	0.1	50V	Ceramic	AB
C9034	9NK1517658000	J	0.1	50V	Ceramic	AB
C9035	9NK1517658000	J	0.1	50V	Ceramic	AB
C9036	9NK1517658000	J	0.1	50V	Ceramic	AB
C9038	9NK1517658000	J	0.1	50V	Ceramic	AB
C9041	9NK1517658000	J	0.1	50V	Ceramic	AB
C9042	9NK1517658000	J	0.1	50V	Ceramic	AB
C9043	9NK1517658000	J	0.1	50V	Ceramic	AB
C9044	9NK1517658000	J	0.1	50V	Ceramic	AB
C9045	9NK1517658000	J	0.1	50V	Ceramic	AB
C9050	9NK1517658000	J	0.1	50V	Ceramic	AB
C9053	9NK1517658000	J	0.1	50V	Ceramic	AB
C9055	9NK1517658000	J	0.1	50V	Ceramic	AB
C9057	9NK1517658000	J	0.1	50V	Ceramic	AB
C9059	9NK1517658000	J	0.1	50V	Ceramic	AB
C9061	9NK1517658000	J	0.1	50V	Ceramic	AB
C9062	9NK1517658000	J	0.1	50V	Ceramic	AB
C9063	9NKF121011333	J	100	16V	Electrolytic	AC
C9065	9NKF143301333	J	33	25V	Electrolytic	AB

9NK5600204253
FORMATTER (Continued)

Ref. No.	Part No.	★			Description	Code
C9067	9NKF141001233	J	10	25V	Electrolytic	AC
C9069	9NKF121011333	J	100	16V	Electrolytic	AC
C9071	9NK1517658000	J	0.1	50V	Ceramic	AB
C9072	9NK1517658000	J	0.1	50V	Ceramic	AB
C9073	9NK1517658000	J	0.1	50V	Ceramic	AB
C9304	9NKF164781208	J	4.7	50V	Electrolytic	AB
C9305	9NK1517658000	J	0.1	50V	Ceramic	AB
C9306	9NK1517658000	J	0.1	50V	Ceramic	AB
C9307	9NK1517658000	J	0.1	50V	Ceramic	AB
C9308	9NKF161081133	J	1	50V	Electrolytic	AB
C9309	9NK1517658000	J	0.1	50V	Ceramic	AB
C9310	9NK1517658000	J	0.1	50V	Ceramic	AB
C9311	9NK1517658000	J	0.1	50V	Ceramic	AB
C9313	9NKF164781208	J	4.7	50V	Electrolytic	AB
C9314	9NKF141001233	J	10	25V	Electrolytic	AC
C9315	9NK1517658000	J	0.1	50V	Ceramic	AB
C9316	9NK1513488400	J	3.3	50V	Ceramic	AF
C9317	9NK1513488400	J	3.3	50V	Ceramic	AF
C9318	9NK1513091600	J	10	50V	Ceramic	AK
C9319	9NKF141001233	J	10	25V	Electrolytic	AC
C9320	9NK1513488400	J	3.3	50V	Ceramic	AF
C9321	9NK1552459100	J	0.22	25V	Ceramic	AB
C9322	9NKF164781208	J	4.7	50V	Electrolytic	AB
C9503	9NK1517658000	J	0.1	50V	Ceramic	AB
C9505	9NK1517658000	J	0.1	50V	Ceramic	AB
C9510	9NK1517658000	J	0.1	50V	Ceramic	AB
C9511	9NK1517658000	J	0.1	50V	Ceramic	AB
C9513	9NK1517658000	J	0.1	50V	Ceramic	AB
C9514	9NK1517658000	J	0.1	50V	Ceramic	AB
C9515	9NK1517658000	J	0.1	50V	Ceramic	AB
C9516	9NK1517658000	J	0.1	50V	Ceramic	AB
C9517	9NK1517658000	J	0.1	50V	Ceramic	AB
C9519	9NK1517658000	J	0.1	50V	Ceramic	AB
C9520	9NK1517658000	J	0.1	50V	Ceramic	AB
C9521	9NK1517658000	J	0.1	50V	Ceramic	AB
C9522	9NK1517658000	J	0.1	50V	Ceramic	AB
C9523	9NKF121001133	J	10	16V	Electrolytic	AB
C9524	9NK1517658000	J	0.1	50V	Ceramic	AB
C9525	9NK1517658000	J	0.1	50V	Ceramic	AB
C9528	9NK1517658000	J	0.1	50V	Ceramic	AB
C9529	9NK1517658000	J	0.1	50V	Ceramic	AB
C9530	9NK1517658000	J	0.1	50V	Ceramic	AB
C9531	9NK1517658000	J	0.1	50V	Ceramic	AB
C9532	9NK1517658000	J	0.1	50V	Ceramic	AB
C9533	9NK1517658000	J	0.1	50V	Ceramic	AB
C9535	9NK1517658000	J	0.1	50V	Ceramic	AB
C9536	9NK1517658000	J	0.1	50V	Ceramic	AB
C9537	9NK1517658000	J	0.1	50V	Ceramic	AB
C9538	9NK1517658000	J	0.1	50V	Ceramic	AB
C9542	9NK1517658000	J	0.1	50V	Ceramic	AB
C9543	9NK1517658000	J	0.1	50V	Ceramic	AB
C9544	9NK1517658000	J	0.1	50V	Ceramic	AB
C9545	9NK1517658000	J	0.1	50V	Ceramic	AB
C9546	9NK1517658000	J	0.1	50V	Ceramic	AB
C9547	9NK1517658000	J	0.1	50V	Ceramic	AB
C9548	9NK1517658000	J	0.1	50V	Ceramic	AB
C9549	9NK1517658000	J	0.1	50V	Ceramic	AB
C9550	9NK1517658000	J	0.1	50V	Ceramic	AB
C9551	9NK1517658000	J	0.1	50V	Ceramic	AB
C9552	9NK1517658000	J	0.1	50V	Ceramic	AB
C9553	9NK1517658000	J	0.1	50V	Ceramic	AB
C9554	9NK1517658000	J	0.1	50V	Ceramic	AB
C9555	9NK1517658000	J	0.1	50V	Ceramic	AB
C9558	9NKF022211433	J	220	6.3V	Electrolytic	AC
C9563	9NK1517658000	J	0.1	50V	Ceramic	AB
C9564	9NK1517658000	J	0.1	50V	Ceramic	AB
C9565	9NK1517658000	J	0.1	50V	Ceramic	AB
C9566	9NKF121001133	J	10	16V	Electrolytic	AB

RESISTORS

Ref. No.	Part No.	★			Description	Code
R9001	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9003	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9005	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9006	9NK0341360300	J	110	1/10W	Metal Oxide	AB
R9007	9NK0341360300	J	110	1/10W	Metal Oxide	AB
R9008	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9010	9NK0341491300	J	56.2	1/10W	Metal Oxide	AB
R9011	9NK0341491300	J	56.2	1/10W	Metal Oxide	AB
R9101	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9102	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9106	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9116	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9131	9NK0343184300	J	180k	1/10W	Metal Oxide	AB
R9132	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R9134	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R9135	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9136	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R9137	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R9138	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R9139	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R9140	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R9201	9NK0619901105	J	33	1/16W	Chip Array	AB
R9202	9NK0619901105	J	33	1/16W	Chip Array	AB
R9203	9NK0619901105	J	33	1/16W	Chip Array	AB
R9204	9NK0619901105	J	33	1/16W	Chip Array	AB
R9206	9NK0341440300	J	39.2	1/10W	Metal Oxide	AB
R9207	9NK0341440300	J	39.2	1/10W	Metal Oxide	AB
R9208	9NK0619901105	J	33	1/16W	Chip Array	AB
R9209	9NK0619901105	J	33	1/16W	Chip Array	AB
R9210	9NK0619901105	J	33	1/16W	Chip Array	AB
R9301	9NK0619900605	J	22	1/16W	Chip Array	AB
R9302	9NK0619900605	J	22	1/16W	Chip Array	AB
R9303	9NK0619900605	J	22	1/16W	Chip Array	AB
R9304	9NK0619900605	J	22	1/16W	Chip Array	AB
R9305	9NK0619900605	J	22	1/16W	Chip Array	AB
R9306	9NK0619900605	J	22	1/16W	Chip Array	AB
R9307	9NK0619900605	J	22	1/16W	Chip Array	AB
R9308	9NK0619900605	J	22	1/16W	Chip Array	AB
R9309	9NK0619900605	J	22	1/16W	Chip Array	AB
R9310	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R9311	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9312	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9314	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9315	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9316	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9319	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9322	9NK0619900605	J	22	1/16W	Chip Array	AB
R9323	9NK0619900605	J	22	1/16W	Chip Array	AB
R9324	9NK0619900605	J	22	1/16W	Chip Array	AB
R9325	9NK0619900605	J	22	1/16W	Chip Array	AB
R9326	9NK0619900605	J	22	1/16W	Chip Array	AB
R9327	9NK0619900605	J	22	1/16W	Chip Array	AB
R9328	9NK0619900605	J	22	1/16W	Chip Array	AB
R9329	9NK0619900605	J	22	1/16W	Chip Array	AB
R9330	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R9501	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9502	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R9503	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9506	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R9507	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9508	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9509	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9510	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R9511	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9512	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R9513	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R9514	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R9515	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9518	9NK0341016300	J	22	1/10W	Metal Oxide	AB
R9522	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9523	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9532	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9542	9NK0341360300	J	110	1/10W	Metal Oxide	AB
R9554	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9559	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9560	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9562	9NK0341593300	J	34	1/10W	Metal Oxide	AB

Ref. No.	Part No.	★	Description			Code
R9565	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R9567	9NK0341560300	J	118	1/10W	Metal Oxide	AB
R9569	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9574	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R9575	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB

9NK5600204253
FORMATTER (Continued)

SWITCHES

S9001	9NK3000700435	J	Switch	AK
S9101	9NK3000701136	J	Switch	AK

MISCELLANEOUS PARTS

FB9000	9NK2921113712	J	Ferrite Bead	AB
FB9001	9NK2921113712	J	Ferrite Bead	AB
FB9002	9NK2921113712	J	Ferrite Bead	AB
FB9004	9NK2921113712	J	Ferrite Bead	AB
FB9005	9NK2921113712	J	Ferrite Bead	AB
FB9006	9NK2921113712	J	Ferrite Bead	AB
FB9010	9NK2921113712	J	Ferrite Bead	AB
FB9011	9NK2921113712	J	Ferrite Bead	AB
FB9012	9NK2921113712	J	Ferrite Bead	AB
FB9502	9NK2921113712	J	Ferrite Bead	AB
FB9507	9NK2921113712	J	Ferrite Bead	AB
CN1000	9NK3070070100	J	Connector, 5Pin	AE
CN9002	9NK3070286069	J	Connector, 70Pin	AQ
CN9003	9NK3070070528	J	Connector, 4Pin	AE

Ref. No.	Part No.	★	Description	Code

9NK5600204232
POWER UNIT

INTEGRATED CIRCUITS

IC101	9NK2633002311	J	DAP008CR2	AG
IC102	9NK2500008010	J	LM7815	AE
⚠ IC131	9NK2510325434	J	TOP246YN	AP
IC201	9NK2500004214	J	TL431	AC
IC231	9NK2500004214	J	TL431	AC
IC232	9NK2500300114	J	TPS75501KC	AY
IC280	9NK2500004214	J	TL431	AC

TRANSISTORS

⚠ Q101	9NKP008040013	J	FET, 2SK3303	AL
Q102	9NKN524800005	J	MMBT5401L	AC
⚠ Q151	9NKO070270010	J	FET, IRG4PC50WPBF	AV
⚠ Q152	9NKP077450035	J	FET, SPW20N60S5	AT
Q154	9NKN231010011	J	2SB562CTZ	AC
Q200	9NKM522000405	J	MMBT3904L	AB
Q203	9NKN522000205	J	MMBT3906L	AB
⚠ Q251	9NKP501200305	J	FET, NTD4302T4G	AK
⚠ Q252	9NKP501200305	J	FET, NTD4302T4G	AK
Q282	9NKN522000205	J	MMBT3906L	AB
Q283	9NKM522000405	J	MMBT3904L	AB

DIODES

⚠ BD101	9NKG101120023	J	2KBP08M	AD
⚠ CR151	9NKG124110020	J	D25XB60	AK
⚠ D101	9NKH770630023	J	RGF1M	AE
D102	9NKH300570434	J	ER102	AB
D103	9NKH300570434	J	ER102	AB
D104	9NKK850750023	J	1N4148W	AC
D105	9NKK850750023	J	1N4148W	AC
D131	9NKH770630023	J	RGF1M	AE
D132	9NKH770570023	J	RGF1D	AE
D133	9NKH770570023	J	RGF1D	AE
D151	9NKK850750023	J	1N4148W	AC
D152	9NKH291360007	J	BYM26C,133	AE
D153	9NKH023610117	J	RHRP1560	AK
D154	9NKH024360017	J	RHRP3060	AP
D155	9NKL351610023	J	1N5406RL	AC
D156	9NKK850750023	J	1N4148W	AC
D157	9NKK850750023	J	1N4148W	AC
D201	9NKI791120017	J	SS36 PKGP7	
D231	9NKH791570023	J	ES3D	AF
D232	9NKH013070631	J	UGF10DCT	AG
D233	9NKI003870123	J	MBRF2560CT	AL
D234	9NKI003870123	J	MBRF2560CT	AL
D235	9NKK850750023	J	1N4148W	AC
ZD101	9NKJ812640231	J	Zener Diode TLZ15B	AB
ZD131	9NKJ812550736	J	Zener Diode 6.8B	
ZD132	9NKJ812690136	J	Zener Diode RLZ 20B	
ZD201	9NKJ812530436	J	Zener Diode RLZ 4.7B	AB

PACKAGED CIRCUITS

SCR201	9NK2200020004	J	SCR, TYN0512	AF
⚠ U101	9NK2310089008	J	Photo Copuler, TLP421	AD
⚠ U102	9NK2310089008	J	Photo Copuler, TLP421	AD
⚠ U131	9NK2310089008	J	Photo Copuler, TLP421	AD
⚠ U132	9NK2310089008	J	Photo Copuler, TLP421	AD

COILS AND TRABSFORMERS

L131	9NK2921113712	J	Ferrite Bead	AB
⚠ L151	9NK2817187480	J	Inductor, 597µH	AX
⚠ L152	9NK2817130180	J	Inductor, 3.7µH	AP
L201	9NK2816460810	J	Inductor, 2µH	AC
L231	9NK2816460810	J	Inductor, 2µH	AC
L232	9NK2816460810	J	Inductor, 2µH	AC
L233	9NK2816310200	J	Inductor, 12µH (K)	AC
L234	9NK2816310200	J	Inductor, 12µH (K)	AC
L251	9NK2817185480	J	Inductor, 12.57mH	AF
⚠ T1	9NK2817341380	J	Transformer	AL
⚠ T2	9NK2811061680	J	Transformer	AP

9NK5600204232
POWER UNIT (Continued)

CAPACITORS

Ref. No.	Part No.	★				Code
C101	9NKQ422201003	J	22	450V	Electrolytic	AK
C102	9NK1572446200	J	2200p	1kV	Ceramic	AC
C103	9NKQ154701103	J	47	35V	Electrolytic	AC
C104	9NK1512467200	J	1	50V	Ceramic	AB
C105	9NKQ144781103	J	4.7	25V	Electrolytic	AB
C107	9NK1512440100	J	330p	50V	Ceramic	AB
C108	9NK1512458100	J	0.1	50V	Ceramic	AB
C109	9NKA144701103	J	47	25V	Electrolytic	AB
C111	9NK1512467200	J	1	50V	Ceramic	AB
C131	9NK1142354400	J	0.01	1kV	Ceramic	AB
C132	9NK1142354400	J	0.01	1kV	Ceramic	AB
C133	9NK1512458100	J	0.1	50V	Ceramic	AB
C134	9NKQ144781103	J	4.7	25V	Electrolytic	AB
C136	9NK1512458100	J	0.1	50V	Ceramic	AB
C137	9NKA144701103	J	47	25V	Electrolytic	AB
C138	9NKQ154701103	J	47	35V	Electrolytic	AC
C139	9NKQ142201403	J	22	25V	Electrolytic	
C151	9NK1762158W20	J	0.47	420V	Electrolytic	AF
C152	9NK1621424410	J	6.8	100V	Electrolytic	AP
C153	9NK1621424410	J	6.8	100V	Electrolytic	AP
⚠ C154	9NKD423310433	J	330	450V	Electrolytic	AU
⚠ C155	9NKD423310433	J	330	450V	Electrolytic	AU
C156	9NKA144701103	J	47	25V	Electrolytic	AB
C201	9NK1522446200	J	2200p	100V	Ceramic	AB
C202	9NKQ101021103	J	1000	10V	Electrolytic	AC
C203	9NKA102211103	J	220	10V	Electrolytic	AB
C204	9NK1512458100	J	0.1	50V	Ceramic	AB
C205	9NK1512458100	J	0.1	50V	Ceramic	AB
C206	9NK1512440100	J	330p	50V	Ceramic	AB
C207	9NK1511454100	J	0.01	50V	Ceramic	AB
C208	9NK1512440100	J	330p	50V	Ceramic	AB
C231	9NK1532438100	J	220p	200V	Ceramic	AB
C232	9NKA144711403	J	470	25V	Electrolytic	AC
C233	9NKA142211103	J	220	25V	Electrolytic	AC
C234	9NK1512458100	J	0.1	50V	Ceramic	AB
C235	9NK1532438100	J	220p	200V	Ceramic	AB
C236	9NKA121521003	J	1500	16V	Electrolytic	AE
C237	9NKA144711403	J	470	25V	Electrolytic	AC
C238	9NK1512458100	J	0.1	50V	Ceramic	AB
C239	9NK1532438100	J	220p	200V	Ceramic	AB
C240A	9NKQ103321003	J	3300	10V	Electrolytic	AE
C240B	9NKQ103321003	J	3300	10V	Electrolytic	AE
C241	9NKQ101021103	J	1000	10V	Electrolytic	AC
C242	9NK1512458100	J	0.1	50V	Ceramic	AB
C243	9NK1532438100	J	220p	200V	Ceramic	AB
C244	9NKA102221303	J	2200	10V	Electrolytic	AE
C245	9NK1512458100	J	0.1	50V	Ceramic	AB
C246	9NK1512458100	J	0.1	50V	Ceramic	AB
C247	9NKA102221303	J	2200	10V	Electrolytic	AE
C248	9NKA102221303	J	2200	10V	Electrolytic	AE
C249	9NK1512458100	J	0.1	50V	Ceramic	AB
C250	9NKQ103321003	J	3300	10V	Electrolytic	AE
C253	9NK1512458100	J	0.1	50V	Ceramic	AB
C260	9NKQ101021103	J	1000	10V	Electrolytic	AC
C261	9NK1512458100	J	0.1	50V	Ceramic	AB
C264	9NK15D300H203	J	22	6.3V	Ceramic	AD
C282	9NKQ144781103	J	4.7	25V	Electrolytic	AB
C283	9NK1512458100	J	0.1	50V	Ceramic	AB
⚠ CY131	9NK1101346032	J	2200p	250VAC		AB
⚠ CY132	9NK1101349032	J	4700p	250VAC		AC

RESISTORS

Ref. No.	Part No.	★				Code
R101A	9NK0313101000	J	100	1/4W	Metal Oxide	AB
R101B	9NK0313101000	J	100	1/4W	Metal Oxide	AB
R102	9NK0341588100	J	2.2k	1/8W	Metal Oxide	AB
R103	9NK0313333000	J	33k	1/4W	Metal Oxide	AB
R104	9NK0313333000	J	33k	1/4W	Metal Oxide	AB
R105	9NK0341026100	J	100	1/8W	Metal Oxide	AB
R106	9NK0341047100	J	2.7k	1/8W	Metal Oxide	AB
R107	9NK0343303100	J	30k	1/8W	Metal Oxide	AB
R108	9NK0133338022	J	3.3	2W		AB
R109	9NK0341059100	J	10k	1/8W	Metal Oxide	AB
R110	9NK0341012100	J	10	1/8W	Metal Oxide	AB
R112	9NK0311202000	J	4.75k	1/4W	Metal Oxide	AB
R114	9NK0123100000	J	10	1/2W		AB
R115A	9NK0401418004	J	649k	1/4W	Metal Oxide	AB
R115B	9NK0401418004	J	649k	1/4W	Metal Oxide	AB
R115C	9NK0401418004	J	649k	1/4W	Metal Oxide	AB
R116	9NK0910500200	J	5 , NTC/3A			AB
R117	9NK0311113000	J	2k	1/4W	Metal Oxide	AB
R131A	9NK0393154600	J	150k	3/4W	Metal Oxide	AB
R131B	9NK0393154600	J	150k	3/4W	Metal Oxide	AB
R132	9NK0123100000	J	10	1/2W		AB
R133A	9NK0311640000	J	715k	1/4W	Metal Oxide	AB
R133B	9NK0311640000	J	715k	1/4W	Metal Oxide	AB
R133C	9NK0311640000	J	715k	1/4W	Metal Oxide	AB
R134	9NK0393470600	J	47	3/4W	Metal Oxide	AB
R135	9NK0313000000	J	0	1/4W	Metal Oxide	AB
R136	9NK0341012100	J	10	1/8W	Metal Oxide	AB
R151	9NK0311578000	J	7.5	1/4W	Metal Oxide	AB
R152	9NK0311578000	J	7.5	1/4W	Metal Oxide	AB
R153	9NK0311113000	J	2k	1/4W	Metal Oxide	AB
R154	9NK0233079103	J	0.07	7W		AC
R155	9NK0233079103	J	0.07	7W		AC
R156	9NK0311578000	J	7.5	1/4W	Metal Oxide	AB
R157	9NK0311026000	J	100	1/4W	Metal Oxide	AB
R158	9NK0311578000	J	7.5	1/4W	Metal Oxide	AB
R159	9NK0311113000	J	2k	1/4W	Metal Oxide	AB
R160A	9NK0311417000	J	46.4k	1/4W	Metal Oxide	AB
R160B	9NK0311417000	J	46.4k	1/4W	Metal Oxide	AB
R160C	9NK0311417000	J	46.4k	1/4W	Metal Oxide	AB
R160D	9NK0311417000	J	46.4k	1/4W	Metal Oxide	AB
R161A	9NK0311097000	J	261k	1/4W	Metal Oxide	AB
R161B	9NK0311097000	J	261k	1/4W	Metal Oxide	AB
R161C	9NK0311097000	J	261k	1/4W	Metal Oxide	AB
R163	9NK0143202200	J	2k	2W		AB
⚠ R163A	9NK0401420000	J	549k	1/4W	Metal Oxide	AB
⚠ R163B	9NK0401420000	J	549k	1/4W	Metal Oxide	AB
⚠ R163C	9NK0401420000	J	549k	1/4W	Metal Oxide	AB
⚠ R164A	9NK0401192002	J	133K	1/4W	Metal Oxide	AB
⚠ R164B	9NK0401192002	J	133K	1/4W	Metal Oxide	AB
⚠ R164C	9NK0401348004	J	137K	1/4W	Metal Oxide	AB
⚠ R164D	9NK0401348004	J	137K	1/4W	Metal Oxide	AB
R170	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R171	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R201	9NK0313150000	J	15	1/4W	Metal Oxide	AB
R202	9NK0341026100	J	100	1/8W	Metal Oxide	AB
R203	9NK0343102100	J	1k	1/8W	Metal Oxide	AB
R204	9NK0341285100	J	1.82k	1/8W	Metal Oxide	AB
R205	9NK0341137100	J	1.1k	1/8W	Metal Oxide	AB
R206	9NK0341039100	J	680	1/8W	Metal Oxide	AB
R207	9NK0343104100	J	100k	1/8W	Metal Oxide	AB
R208	9NK0341036100	J	470	1/8W	Metal Oxide	AB
R209	9NK0311026000	J	100	1/4W	Metal Oxide	AB
R210	9NK0341041100	J	1k	1/8W	Metal Oxide	AB
R211	9NK0341012100	J	10	1/8W	Metal Oxide	AB
R212	9NK0341059100	J	10k	1/8W	Metal Oxide	AB
R213	9NK0341041100	J	1k	1/8W	Metal Oxide	AB
R214	9NK0311026000	J	100	1/4W	Metal Oxide	AB
R215	9NK0341041100	J	1k	1/8W	Metal Oxide	AB
R216	9NK0341041100	J	1k	1/8W	Metal Oxide	AB
R217	9NK0311026000	J	100	1/4W	Metal Oxide	AB
R218	9NK0393182600	J	1.8K	3/4W	Metal Oxide	AB
R231	9NK0313330000	J	33	1/4W	Metal Oxide	AB
R232	9NK0393182600	J	1.8K	3/4W	Metal Oxide	AB
R233	9NK0313330000	J	33	1/4W	Metal Oxide	AB
R234	9NK0393182600	J	1.8K	3/4W	Metal Oxide	AB
R235	9NK0313330000	J	33	1/4W	Metal Oxide	AB
R237	9NK0313330000	J	33	1/4W	Metal Oxide	AB
R238	9NK0341030100	J	200	1/8W	Metal Oxide	AB
R239	9NK0341041100	J	1k	1/8W	Metal Oxide	AB
R240	9NK0341026100	J	100	1/8W	Metal Oxide	AB
R241	9NK0341398100	J	32.4k	1/8W	Metal Oxide	AB
R242	9NK0341157100	J	110k	1/8W	Metal Oxide	AB
R243	9NK0341415100	J	11.8k	1/8W	Metal Oxide	AB

Ref. No.	Part No.	★	Description	Code

9NK5600204232
POWER UNIT (Continued)

R244	9NK0341585100	J	64.9k	1/8W	Metal Oxide	AB
R247	9NK0341079100	J	51k	1/8W	Metal Oxide	AB
R248	9NK0341318100	J	30.1k	1/8W	Metal Oxide	AB
R249A	9NK0623004100	J	0.015			AB
R249B	9NK0623004100	J	0.015			AB
R249C	9NK0623004100	J	0.015			AB
R250	9NK0341108100	J	1M	1/8W	Metal Oxide	AB
R261	9NK0341059100	J	10k	1/8W	Metal Oxide	AB
R265	9NK0341059100	J	10k	1/8W	Metal Oxide	AB
R280	9NK0341041100	J	1k	1/8W	Metal Oxide	AB
R291	9NK0341036100	J	470	1/8W	Metal Oxide	AB
⚠ NTC151	9NK0911000116	J	10	(L)		AE
⚠ NTC152	9NK0911000116	J	10	(L)		AE
VR201	9NK0606211002	J	3k	3/10W		AD

MISCELLANEOUS PARTS

CN151	9NK3071121734	J	Connector, 5Pin	AC
CN152	9NK3670335901	J	Wire With Housing	AG
CN153	9NK3670335901	J	Wire With Housing	AG
⚠ F151	9NK0805340702	J	Fuse, 4A 250V	AD
HS101	9NK3343203701	J	Heat Sink for Q151, D152, D153	AM
HS102	9NK3343203701	J	Heat Sink for CR151, D154	AM
HS131	9NK3341072101	J	Heat Sink for IC131	AE
HS231	9NK3343203800	J	Heat Sink for D232, D233, D334	AK
HS232	9NK3343902300	J	Heat Sink for IC231	AC
JP151	9NK3071323734	J	Connector, 2Pin	AB
RL151	9NK0720700107	J	Relay	AL
⚠ THM1	9NK0930200002	J	TMST	AN
	9NK3100300600	J	ScreW M3*0.5*6 x2	AB
	9NK3100301000	J	ScreW M3*0.5*10 x3	AB
	9NK3100301200	J	ScreW M3*0.5*12 x4	AB
	9NK3240170300	J	Insulator x 2	AC
	9NK3240173300	J	Insulator	AB
	9NK3240180000	J	Insulator Silicon	AB
	9NK3240191000	J	Insulator Bushing	

9NK5600204234
LVPS CONTROL UNIT

INTEGRATED CIRCUITS

⚠ IC254	9NK2510376031	J	ISL6526	AQ
U280	9NK2520004100	J	LM393DR2G	AC

TRANSISTORS

Q201	9NKM522000405	J	MMBT3904L	AB
Q202	9NKM522000405	J	MMBT3904L	AB
Q280	9NKM522000405	J	MMBT3904L	AB
Q281	9NKN522000205	J	MMBT3906L	AB

DIODE

SKD1	9NKI820330323	J	SS14	AC

CAPACITORS

C251	9NK1512445100	J	1000P	50V	Ceramic	AB
C252	9NK1512458100	J	0.1	50V	Ceramic	AB
C254	9NK15A7691100	J	10	10V	Ceramic	AB
C255	9NK1512458100	J	0.1	50V	Ceramic	AB
C256	9NK1511518100	J	33p	50V	Ceramic	AB
C257	9NK1512451100	J	5600p	50V	Ceramic	AB
C259	9NK1512458100	J	0.1	50V	Ceramic	AB
C262	9NK1512458100	J	0.1	50V	Ceramic	AB
C280	9NK1511454100	J	0.01	50V	Ceramic	AB
C281	9NK1511454100	J	0.01	50V	Ceramic	AB
C284	9NK1511447100	J	3300p	50V	Ceramic	AB
C285	9NK1512458100	J	0.1	50V	Ceramic	AB

RESISTORS

R251	9NK0341245100	J	9.53k	1/8W	Metal Oxide	AB
R252	9NK0341409100	J	6.49k	1/8W	Metal Oxide	AB
R253	9NK0341571100	J	1.07k	1/8W	Metal Oxide	AB
R254	9NK0341045100	J	2.26k	1/8W	Metal Oxide	AB
R256	9NK0341036100	J	470	1/8W	Metal Oxide	AB
R257	9NK0341041100	J	1k	1/8W	Metal Oxide	AB
R258	9NK0341059100	J	10k	1/8W	Metal Oxide	AB
R259	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R260	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R263	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R281	9NK0341059100	J	10k	1/8W	Metal Oxide	AB
R282	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R283	9NK0341054100	J	6.2k	1/8W	Metal Oxide	AB
R284	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R285	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R287	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R288	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R289	9NK0341092100	J	150k	1/8W	Metal Oxide	AB
R290	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R292	9NK0341203100	J	5.62k	1/8W	Metal Oxide	AB
R293	9NK0341202100	J	4.75k	1/8W	Metal Oxide	AB
R294	9NK0341466100	J	8.66k	1/8W	Metal Oxide	AB

MISCELLANEOUS PART

CN252	9NK3071870034	J	Connector, 14Pin	AE

9NK5600204245
P.F.C CONTROL UNIT

INTEGRATED CIRCUITS

⚠ IC321	9NK2510252114	J	UCC3818N	AN
IC322	9NK2540059239	J	TC428CPA	AP
IC323	9NK2540059239	J	TC428CPA	AP
IC325	9NK2510063010	J	NE556	AE
IC326	9NK2510063010	J	NE556	AE
IC327	9NK2500004115	J	431UA	AF

TRANSISTORS

Q321	9NKM522000505	J	MMBT4401L	AB
Q322	9NKN522000405	J	MMBT4403L	AB
Q357	9NKM522000505	J	MMBT4401L	AB

DIODE

D321	9NKK810750207	J	BAS32L/D	AB
D322	9NKK810750207	J	BAS32L/D	AB
D323	9NKK810750207	J	BAS32L/D	AB
D324	9NKK810750207	J	BAS32L/D	AB
D325	9NKK810750207	J	BAS32L/D	AB
D326	9NKK810750207	J	BAS32L/D	AB
D327	9NKK810750207	J	BAS32L/D	AB
D328	9NKK810750207	J	BAS32L/D	AB
D329	9NKK810750207	J	BAS32L/D	AB
D331	9NKK810750207	J	BAS32L/D	AB
D332	9NKK810750207	J	BAS32L/D	AB
D333	9NKK810750207	J	BAS32L/D	AB
D334	9NKK810750207	J	BAS32L/D	AB
D336	9NKK810750207	J	BAS32L/D	AB
ZD323	9NKJ812640336	J	RLZ 15C	AB
ZD324	9NKJ812640336	J	RLZ 15C	AB

CAPACITORS

C321	9NK1512458100	J	0.1	50V	Ceramic	AB
C322	9NK1511538100	J	220p	50V	Ceramic	AB
C323	9NK1552467200	J	1	25V	Ceramic	AB
C324	9NK1552467200	J	1	25V	Ceramic	AB
C325	9NK1517667200	J	1	50V	Ceramic	AB
C326	9NK1517667200	J	1	50V	Ceramic	AB
C327	9NK1512456100	J	0.022	50V	Ceramic	AB

Ref. No.	Part No.	★	Description			Code

9NK5600204245
P.F.C CONTROL UNIT (Continued)

C328	9NK1557667100	J	1	25V	Ceramic	AB
C329	9NK1511538100	J	220p	50V	Ceramic	AB
C330	9NK1557667100	J	1	25V	Ceramic	AB
C331	9NK1511534100	J	150p	50V	Ceramic	AB
C332	9NK1517667200	J	1	50V	Ceramic	AB
C333	9NK1517667200	J	1	50V	Ceramic	AB
C334	9NK1511538100	J	220p	50V	Ceramic	AB
C335	9NK1512446100	J	2200p	50V	Ceramic	AB
C336	9NK1511542100	J	470p	50V	Ceramic	AB
C337	9NK1557667100	J	1	25V	Ceramic	AB
C338	9NK1512458100	J	0.1	50V	Ceramic	AB
C339	9NK0343000100	J	0	1/8W	Metal Oxide	AB
C340	9NK1512457200	J	0.047	50V	Ceramic	AB
C345	9NK1512458100	J	0.1	50V	Ceramic	AB
C346	9NK1512458100	J	0.1	50V	Ceramic	AB
C347	9NK1512454100	J	0.01	50V	Ceramic	AB
C348	9NK1512456200	J	0.022	50V	Ceramic	AB
C349	9NK1512458100	J	0.1	50V	Ceramic	AB
C350	9NK1517664200	J	0.47	50V	Ceramic	AB
C351	9NK1552467200	J	1	25V	Ceramic	AB
C352	9NK1512458100	J	0.1	50V	Ceramic	AB
C353	9NK1517667200	J	1	50V	Ceramic	AB
C354	9NK1557667100	J	1	25V	Ceramic	AB
C355	9NK1517667200	J	1	50V	Ceramic	AB
C356	9NK1517667200	J	1	50V	Ceramic	AB
C357	9NK1512458100	J	0.1	50V	Ceramic	AB
C358	9NK1512458100	J	0.1	50V	Ceramic	AB
C359	9NK1517667200	J	1	50V	Ceramic	AB

RESISTORS

R321	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R322	9NK0313202000	J	2k	1/4W	Metal Oxide	AB
R323	9NK0311287000	J	5.11k	1/4W	Metal Oxide	AB
R324	9NK0343393100	J	39k	1/8W	Metal Oxide	AB
R326	9NK0343103100	J	10k	1/8W	Metal Oxide	AB
R327	9NK0343100100	J	10	1/8W	Metal Oxide	AB
R328	9NK0343100100	J	10	1/8W	Metal Oxide	AB
R329	9NK0343100100	J	10	1/8W	Metal Oxide	AB
R330	9NK0343101100	J	100	1/8W	Metal Oxide	AB
R331	9NK0343103100	J	10k	1/8W	Metal Oxide	AB
R332	9NK0343153100	J	15k	1/8W	Metal Oxide	AB
R333	9NK0341299100	J	158k	1/8W	Metal Oxide	AB
R334	9NK0341185100	J	7.5k	1/8W	Metal Oxide	AB
R335	9NK0341435100	J	12.4k	1/8W	Metal Oxide	AB
R336	9NK0341676100	J	309k	1/8W	Metal Oxide	AB
R337	9NK0343822100	J	8.2k	1/8W	Metal Oxide	AB
R338	9NK0313104000	J	100k	1/4W	Metal Oxide	AB
R339	9NK0343182100	J	1.8k	1/8W	Metal Oxide	AB
R340	9NK0341338100	J	18.2k	1/8W	Metal Oxide	AB
R346	9NK0343434100	J	430k	1/8W	Metal Oxide	AB
R347	9NK0343684100	J	680k	1/8W	Metal Oxide	AB
R348	9NK0341455100	J	115k	1/8W	Metal Oxide	AB
R349	9NK0341066100	J	20k	1/8W	Metal Oxide	AB
R350	9NK0341092100	J	150k	1/8W	Metal Oxide	AB
R351	9NK0341155100	J	68.1k	1/8W	Metal Oxide	AB
R352	9NK0341457100	J	78.7k	1/8W	Metal Oxide	AB
R353	9NK0343225100	J	2.2M	1/8W	Metal Oxide	AB
R354	9NK0343225100	J	2.2M	1/8W	Metal Oxide	AB
R355	9NK0343103100	J	10k	1/8W	Metal Oxide	AB
R356	9NK0343104100	J	100k	1/8W	Metal Oxide	AB
R357	9NK0341196100	J	22.1k	1/8W	Metal Oxide	AB
R358	9NK0341059100	J	10k	1/8W	Metal Oxide	AB
R359	9NK0343362100	J	3.6k	1/8W	Metal Oxide	AB
R360	9NK0343362100	J	3.6k	1/8W	Metal Oxide	AB
R361	9NK0343122100	J	1.2k	1/8W	Metal Oxide	AB
R362	9NK0343362100	J	3.6k	1/8W	Metal Oxide	AB
R363	9NK0343752100	J	7.5k	1/8W	Metal Oxide	AB
R364	9NK0343122100	J	1.2k	1/8W	Metal Oxide	AB

MISCELLANEOUS PARTS

	9NK3420005401	J	Clip	AB
	9NK3421267000	J	Braket	AC
	9NK3071780934	J	pin Plug	AC
	9NK3422018000	J	Spacer Support	AB

9NK5600204233
FILTER UNIT

DIODES

D301	9NKI830870023	J	SS26	AF
⚠ TVR301	9NK0923010145	J	Varistor	AB

COILS

⚠ FL301	9NK2817219780	J	Line Filter 8mH	AP
⚠ FL302	9NK2817219780	J	Line Filter 8mH	AP
⚠ FL303	9NK2817223780	J	Line Filter 350µH	AG

CAPACITORS

C301	9NKQ141001403	J	10	25V	AB	
⚠ CX301	9NK1604317239	J	1	275VAC		AF
⚠ CX302	9NK1604317239	J	1	275VAC		AF
⚠ CX303	9NK1604313250	J	0.22	275VAC		AC
⚠ CY301	9NK1101345027	J	1000p	250VAC		AB
⚠ CY302	9NK1101345027	J	1000p	250VAC		AB
⚠ CY303	9NK1101346027	J	2200p	250VAC		
⚠ CY304	9NK1101346027	J	2200p	250VAC		

RESISTORS

⚠ R301A	9NK0401101000	J	301k	1/4W	Metal Oxide	AB
⚠ R301B	9NK0401101000	J	301k	1/4W	Metal Oxide	AB
⚠ R301C	9NK0401101000	J	301k	1/4W	Metal Oxide	AB
R302	9NK0311024000	J	68	1/4W	Metal Oxide	AB
R303	9NK0311059000	J	10k	1/4W	Metal Oxide	AB

MISCELLANEOUS PARTS

CN301	9NK3070842034	J	Connector, 5pin	
CN302	9NK3071173034	J	Connector, 3pin	AB
CN303	9NK3071121734	J	Connector, 5pin	AC
CN304	9NK3070168134	J	Plug, 2pin	
⚠ F301	9NK0803341202	J	Fuse 8A/250V	AD
FG_F	9NK3640990001	J	Wire With Terminal	AC
JP301	9NK3071323734	J	Connector 2pin	AB
⚠ K301	9NK0725030115	J	Relay	AV

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PC I/F UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC8001	9NK001-15161	J	Reset-R3112N151A	AN
IC8002	9NK001-15166	J	Regulator, PQ070XZ01	AR
IC8003	9NK001-10061	J	CPU(SH3), HD6417709SBP133V	BV
IC8004	9NK001-11058	J	EEPROM, AT24C128N	AY
IC8005	9NK001-15162	J	RESET-R3112N291A	AN
IC8006	9NK001-12128	J	CMOS, 74LVX125	AL
IC8007	9NK001-11059	J	FLASH Memory, LH28F640BFE	BS
IC8008	9NK001-11064	J	SDRAM, HY57V641620HG	BF
IC8009	9NK001-11064	J	SDRAM, HY57V641620HG	BF
IC8010	9NK001-15158	J	Video Decoder, UPD64011B	BS
IC8011	9NK001-15157	J	Regulator, LM1117MPX	AS
IC8012	9NK001-12126	J	CMOS, 74VHC153MTC	AM
IC8013	9NK001-11060	J	SDRAM, MSM56V16160F	AY
IC8014	9NK001-15075	J	LPF, SM5301AS	AZ
IC8015	9NK001-15160	J	Compareter, LM319MX	AS
IC8016	9NK001-12127	J	CMOS, 74LCX157MTC	AM
IC8017	9NK001-15170	J	AMp ADC PLL, AD9888	BY
IC8018	9NK001-15164	J	Regulator, PQ050DZ01Z	AN
IC8019	9NK001-15165	J	Regulator, PQ033DZ01Z	AN
IC8020	9NK001-15168	J	Panel Link Receiver, Sii169	BQ
IC8021	9NK001-12125	J	CMOS, BU4053B	AM
IC8022	9NK001-11056	J	EEPROM, 24LC02B	AS
IC8023	9NK001-11057	J	EEPROM, 24LC01B	AQ
IC8024	9NK001-15152	J	Potentiometer, BU9831F	AX
IC8025	9NK001-14008	J	CVIC2, MB87M1370TB	
IC8026	9NK001-11063	J	SDRAM, HY57V643220CTP	BD
IC8027	9NK001-11063	J	SDRAM, HY57V643220CTP	BD
IC8028	9NK001-11063	J	SDRAM, HY57V643220CTP	BD
IC8029	9NK001-11063	J	SDRAM, HY57V643220CTP	BD
IC8030	9NK001-15167	J	Regulator, PQ070XH02Z	AR
IC8032	9NK001-14009	J	GA5, RH-IXA555WJZZQ	BT
IC8033	9NK001-11067	J	DDRAM, HY5DU283222AQP	BM
IC8036	9NK001-15159	J	Regulator, LP2995	AT

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q8002	9NK001-20012	J	2SA1037AKQ	AE
Q8005	9NK001-20012	J	2SA1037AKQ	AE
Q8006	9NK001-20011	J	2SC2412KQ	AE
Q8007	9NK001-20011	J	2SC2412KQ	AE
Q8008	9NK001-20012	J	2SA1037AKQ	AE
Q8009	9NK001-20012	J	2SA1037AKQ	AE
Q8010	9NK001-20011	J	2SC2412KQ	AE
Q8011	9NK001-20011	J	2SC2412KQ	AE
Q8012	9NK001-20045	J	HN1B04FU	AG
Q8013	9NK001-20011	J	2SC2412KQ	AE
Q8014	9NK001-20011	J	2SC2412KQ	AE
Q8015	9NK001-20036	J	FET, NDC7002N	AM
Q8016	9NK001-20046	J	DTC143TE	AG
Q8017	9NK001-20046	J	DTC143TE	AG
Q8018	9NK001-20046	J	DTC143TE	AG
Q8019	9NK001-20046	J	DTC143TE	AG

DIODES

Ref. No.	Part No.	★	Description	Code
D8001	9NK001-30034	J	Shotky Diode RB520S	AE
D8002	9NK001-30026	J	MA3S137	AF
D8003	9NK001-30026	J	MA3S137	AF
D8004	9NK001-30034	J	Shotky Diode RB520S	AE
D8005	9NK001-30034	J	Shotky Diode RB520S	AE
D8006	9NK001-30026	J	MA3S137	AF
D8007	9NK001-30026	J	MA3S137	AF
D8008	9NK001-30026	J	MA3S137	AF
D8009	9NK001-30026	J	MA3S137	AF
D8010	9NK001-30026	J	MA3S137	AF
D8011	9NK001-30026	J	MA3S137	AF
D8012	9NK001-30026	J	MA3S137	AF
D8013	9NK001-30026	J	MA3S137	AF
D8014	9NK001-30034	J	Shotky Diode RB520S	AE
D8015	9NK001-30034	J	Shotky Diode RB520S	AE
D8016	9NK001-30035	J	Zener Diode 12V	AE
D8017	9NK001-30035	J	Zener Diode 12V	AE
D8018	9NK001-30035	J	Zener Diode 12V	AE
D8019	9NK001-30035	J	Zener Diode 12V	AE
D8020	9NK001-30034	J	Shotky Diode RB520S	AE
D8101	9NK001-30035	J	Zener Diode 12V	AE

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
X8001	9NK001-80052	J	Crystal, 32.768kHz	AQ
X8002	9NK001-80038	J	Crystal, 16.588MHz	AS
X8003	9NK001-80034	J	Crystal, 24.576MHz	AS
X8004	9NK001-80053	J	Crystal Oscillator, 65.000MHz	AY
X8005	9NK001-80027	J	Crystal Oscillator, 25.000MHz	AY

COILS

Ref. No.	Part No.	★	Description	Code
L8001	9NK001-81082	J	Peaking, 3.3µH	AG
L8002	9NK001-81096	J	Peaking, 1µH	AF
L8003	9NK001-81093	J	Peaking, 22µH	AF
L8004	9NK001-81091	J	Peaking, 10µH	AF
L8006	9NK001-81093	J	Peaking, 22µH	AF
L8007	9NK001-81093	J	Peaking, 22µH	AF
L8008	9NK001-81095	J	Peaking, 47µH	AF
L8009	9NK001-81094	J	Peaking, 33µH	AF
L8010	9NK001-81091	J	Peaking, 10µH	AF
L8011	9NK001-81092	J	Peaking, 15µH	AG
L8012	9NK001-81093	J	Peaking, 22µH	AF
L8013	9NK001-81093	J	Peaking, 22µH	AF
L8014	9NK001-81093	J	Peaking, 22µH	AF
L8015	9NK001-81093	J	Peaking, 22µH	AF
L8016	9NK001-81082	J	Peaking, 3.3µH	AG
L8017	9NK001-81082	J	Peaking, 3.3µH	AG
L8020	9NK001-81083	J	Coil	AW
L8021	9NK001-81083	J	Coil	AW
L8022	9NK001-81083	J	Coil	AW
L8023	9NK001-81083	J	Coil	AW

CAPACITORS

Ref. No.	Part No.	★				Code
C8001	9NK001-42096	J	0.01	50V	Ceramic	AC
C8004	9NK001-40170	J	150	4V	NP	AK
C8005	9NK001-40166	J	100	6.3V	Electrolytic	AF
C8006	9NK001-42162	J	0.33	10V	Ceramic	AF
C8007	9NK001-42157	J	0.1	25V	Ceramic	AD
C8008	9NK001-42157	J	0.1	25V	Ceramic	AD
C8009	9NK001-42156	J	1	10V	Ceramic	AD
C8010	9NK001-42157	J	0.1	25V	Ceramic	AD
C8011	9NK001-42157	J	0.1	25V	Ceramic	AD
C8012	9NK001-42157	J	0.1	25V	Ceramic	AD
C8013	9NK001-42157	J	0.1	25V	Ceramic	AD
C8014	9NK001-42157	J	0.1	25V	Ceramic	AD
C8015	9NK001-42156	J	1	10V	Ceramic	AD
C8016	9NK001-42156	J	1	10V	Ceramic	AD
C8017	9NK001-42157	J	0.1	25V	Ceramic	AD
C8018	9NK001-42156	J	1	10V	Ceramic	AD
C8019	9NK001-42156	J	1	10V	Ceramic	AD
C8020	9NK001-42104	J	470p	50V	Ceramic	AC
C8021	9NK001-42156	J	1	10V	Ceramic	AD
C8022	9NK001-42104	J	470p	50V	Ceramic	AC
C8023	9NK001-42156	J	1	10V	Ceramic	AD
C8024	9NK001-42156	J	1	10V	Ceramic	AD
C8025	9NK001-42115	J	10p	50V	Ceramic	AD
C8026	9NK001-42115	J	10p	50V	Ceramic	AD
C8027	9NK001-42096	J	0.01	50V	Ceramic	AC
C8028	9NK001-42103	J	15p	50V	Ceramic	AC
C8029	9NK001-42103	J	15p	50V	Ceramic	AC
C8030	9NK001-42160	J	10	6.3V	Ceramic	AD
C8031	9NK001-42157	J	0.1	25V	Ceramic	AD
C8032	9NK001-42156	J	1	10V	Ceramic	AD
C8033	9NK001-42157	J	0.1	25V	Ceramic	AD
C8036	9NK001-42099	J	100p	50V	Ceramic	AC
C8037	9NK001-42157	J	0.1	25V	Ceramic	AD
C8038	9NK001-42157	J	0.1	25V	Ceramic	AD
C8039	9NK001-42157	J	0.1	25V	Ceramic	AD
C8040	9NK001-42160	J	10	6.3V	Ceramic	AD
C8041	9NK001-42156	J	1	10V	Ceramic	AD
C8042	9NK001-42157	J	0.1	25V	Ceramic	AD

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PC I/F UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C8043	9NK001-42157	J	0.1	25V	Ceramic	AD
C8044	9NK001-42156	J	1	10V	Ceramic	AD
C8045	9NK001-42157	J	0.1	25V	Ceramic	AD
C8046	9NK001-42157	J	0.1	25V	Ceramic	AD
C8047	9NK001-42156	J	1	10V	Ceramic	AD
C8048	9NK001-42156	J	1	10V	Ceramic	AD
C8049	9NK001-42157	J	0.1	25V	Ceramic	AD
C8050	9NK001-40167	J	10	16V	Electrolytic	AF
C8051	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8052	9NK001-40167	J	10	16V	Electrolytic	AF
C8053	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8054	9NK001-42157	J	0.1	25V	Ceramic	AD
C8055	9NK001-42157	J	0.1	25V	Ceramic	AD
C8056	9NK001-42157	J	0.1	25V	Ceramic	AD
C8057	9NK001-42157	J	0.1	25V	Ceramic	AD
C8058	9NK001-42157	J	0.1	25V	Ceramic	AD
C8059	9NK001-42157	J	0.1	25V	Ceramic	AD
C8060	9NK001-42157	J	0.1	25V	Ceramic	AD
C8063	9NK001-42138	J	220p	50V	Ceramic	AD
C8065	9NK001-42157	J	0.1	25V	Ceramic	AD
C8066	9NK001-42157	J	0.1	25V	Ceramic	AD
C8067	9NK001-42157	J	0.1	25V	Ceramic	AD
C8068	9NK001-42123	J	330p	50V	Ceramic	AD
C8069	9NK001-42157	J	0.1	25V	Ceramic	AD
C8070	9NK001-42157	J	0.1	25V	Ceramic	AD
C8071	9NK001-42157	J	0.1	25V	Ceramic	AD
C8072	9NK001-42157	J	0.1	25V	Ceramic	AD
C8074	9NK001-42157	J	0.1	25V	Ceramic	AD
C8075	9NK001-42157	J	0.1	25V	Ceramic	AD
C8077	9NK001-40167	J	10	16V	Electrolytic	AF
C8078	9NK001-42157	J	0.1	25V	Ceramic	AD
C8079	9NK001-42157	J	0.1	25V	Ceramic	AD
C8080	9NK001-42157	J	0.1	25V	Ceramic	AD
C8081	9NK001-42157	J	0.1	25V	Ceramic	AD
C8082	9NK001-42157	J	0.1	25V	Ceramic	AD
C8084	9NK001-42157	J	0.1	25V	Ceramic	AD
C8085	9NK001-42157	J	0.1	25V	Ceramic	AD
C8086	9NK001-42157	J	0.1	25V	Ceramic	AD
C8087	9NK001-42157	J	0.1	25V	Ceramic	AD
C8088	9NK001-42157	J	0.1	25V	Ceramic	AD
C8089	9NK001-40167	J	10	16V	Electrolytic	AF
C8090	9NK001-42157	J	0.1	25V	Ceramic	AD
C8091	9NK001-42157	J	0.1	25V	Ceramic	AD
C8092	9NK001-42157	J	0.1	25V	Ceramic	AD
C8093	9NK001-42157	J	0.1	25V	Ceramic	AD
C8094	9NK001-42157	J	0.1	25V	Ceramic	AD
C8095	9NK001-42096	J	0.01	50V	Ceramic	AC
C8096	9NK001-42157	J	0.1	25V	Ceramic	AD
C8097	9NK001-42157	J	0.1	25V	Ceramic	AD
C8098	9NK001-40167	J	10	16V	Electrolytic	AF
C8099	9NK001-42157	J	0.1	25V	Ceramic	AD
C8100	9NK001-42157	J	0.1	25V	Ceramic	AD
C8101	9NK001-42157	J	0.1	25V	Ceramic	AD
C8102	9NK001-42157	J	0.1	25V	Ceramic	AD
C8103	9NK001-40171	J	1	50V	Electrolyt(NP)	AH
C8104	9NK001-42157	J	0.1	25V	Ceramic	AD
C8105	9NK001-42157	J	0.1	25V	Ceramic	AD
C8107	9NK001-42157	J	0.1	25V	Ceramic	AD
C8108	9NK001-42157	J	0.1	25V	Ceramic	AD
C8109	9NK001-42157	J	0.1	25V	Ceramic	AD
C8110	9NK001-42157	J	0.1	25V	Ceramic	AD
C8111	9NK001-42099	J	100p	50V	Ceramic	AC
C8112	9NK001-42147	J	150p	50V	Ceramic	AC
C8113	9NK001-42157	J	0.1	25V	Ceramic	AD
C8114	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8115	9NK001-42189	J	27p	50V	Ceramic	AC
C8116	9NK001-42157	J	0.1	25V	Ceramic	AD
C8117	9NK001-42157	J	0.1	25V	Ceramic	AD
C8118	9NK001-42189	J	27p	50V	Ceramic	AC
C8119	9NK001-42115	J	10p	50V	Ceramic	AD
C8120	9NK001-42115	J	10p	50V	Ceramic	AD
C8121	9NK001-42115	J	10p	50V	Ceramic	AD
C8122	9NK001-42157	J	0.1	25V	Ceramic	AD
C8123	9NK001-42157	J	0.1	25V	Ceramic	AD
C8124	9NK001-42157	J	0.1	25V	Ceramic	AD
C8125	9NK001-42157	J	0.1	25V	Ceramic	AD
C8126	9NK001-42115	J	10p	50V	Ceramic	AD
C8127	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8130	9NK001-42157	J	0.1	25V	Ceramic	AD
C8131	9NK001-42157	J	0.1	25V	Ceramic	AD
C8132	9NK001-40165	J	22	6.3V	Electrolytic	AF
C8133	9NK001-40163	J	220	6.3V	Electrolytic	AF
C8134	9NK001-42157	J	0.1	25V	Ceramic	AD
C8135	9NK001-42157	J	0.1	25V	Ceramic	AD
C8136	9NK001-42157	J	0.1	25V	Ceramic	AD
C8137	9NK001-42157	J	0.1	25V	Ceramic	AD
C8138	9NK001-42157	J	0.1	25V	Ceramic	AD
C8139	9NK001-42157	J	0.1	25V	Ceramic	AD
C8140	9NK001-42157	J	0.1	25V	Ceramic	AD
C8141	9NK001-42157	J	0.1	25V	Ceramic	AD
C8142	9NK001-42157	J	0.1	25V	Ceramic	AD
C8143	9NK001-42113	J	4.7	10V	Ceramic	AD
C8147	9NK001-42157	J	0.1	25V	Ceramic	AD
C8148	9NK001-42157	J	0.1	25V	Ceramic	AD
C8149	9NK001-40169	J	0.47	50V	Elect.(NP)	AH
C8150	9NK001-42108	J	5p	50V	Ceramic	AC
C8151	9NK001-42113	J	4.7	10V	Ceramic	AD
C8152	9NK001-42130	J	2200p	25V	Ceramic	AD
C8153	9NK001-42157	J	0.1	25V	Ceramic	AD
C8155	9NK001-42156	J	1	10V	Ceramic	AD
C8156	9NK001-42156	J	1	10V	Ceramic	AD
C8157	9NK001-42156	J	1	10V	Ceramic	AD
C8158	9NK001-42157	J	0.1	25V	Ceramic	AD
C8159	9NK001-42157	J	0.1	25V	Ceramic	AD
C8160	9NK001-42161	J	0.047	25V	Ceramic	AD
C8161	9NK001-42161	J	0.047	25V	Ceramic	AD
C8162	9NK001-42161	J	0.047	25V	Ceramic	AD
C8163	9NK001-42163	J	1000p	25V	Ceramic	AD
C8164	9NK001-42161	J	0.047	25V	Ceramic	AD
C8165	9NK001-42161	J	0.047	25V	Ceramic	AD
C8166	9NK001-42161	J	0.047	25V	Ceramic	AD
C8167	9NK001-42157	J	0.1	25V	Ceramic	AD
C8168	9NK001-42157	J	0.1	25V	Ceramic	AD
C8169	9NK001-42157	J	0.1	25V	Ceramic	AD
C8170	9NK001-42157	J	0.1	25V	Ceramic	AD
C8171	9NK001-42157	J	0.1	25V	Ceramic	AD
C8172	9NK001-42157	J	0.1	25V	Ceramic	AD
C8173	9NK001-42157	J	0.1	25V	Ceramic	AD
C8174	9NK001-42157	J	0.1	25V	Ceramic	AD
C8175	9NK001-42157	J	0.1	25V	Ceramic	AD
C8176	9NK001-42157	J	0.1	25V	Ceramic	AD
C8177	9NK001-42157	J	0.1	25V	Ceramic	AD
C8178	9NK001-42157	J	0.1	25V	Ceramic	AD
C8179	9NK001-42157	J	0.1	25V	Ceramic	AD
C8180	9NK001-42157	J	0.1	25V	Ceramic	AD
C8181	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8182	9NK001-42157	J	0.1	25V	Ceramic	AD
C8183	9NK001-42158	J	3900p	16V	Film	AG
C8184	9NK001-42159	J	0.039	16V	Film	AH
C8185	9NK001-42157	J	0.1	25V	Ceramic	AD
C8186	9NK001-42157	J	0.1	25V	Ceramic	AD
C8187	9NK001-40165	J	22	6.3V	Electrolytic	AF
C8188	9NK001-42157	J	0.1	25V	Ceramic	AD
C8189	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8190	9NK001-40165	J	22	6.3V	Electrolytic	AF
C8191	9NK001-42162	J	0.33	10V	Ceramic	AF
C8192	9NK001-42157	J	0.1	25V	Ceramic	AD
C8193	9NK001-42157	J	0.1	25V	Ceramic	AD
C8194	9NK001-42157	J	0.1	25V	Ceramic	AD
C8195	9NK001-42157	J	0.1	25V	Ceramic	AD
C8198	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8199	9NK001-42099	J	100p	50V	Ceramic	AC
C8200	9NK001-42099	J	100p	50V	Ceramic	AC
C8201	9NK001-42099	J	100p	50V	Ceramic	AC
C8202	9NK001-42099	J	100p	50V	Ceramic	AC
C8203	9NK001-40165	J	22	6.3V	Electrolytic	AF
C8204	9NK001-42156	J	1	10V	Ceramic	AD
C8205	9NK001-42099	J	100p	50V	Ceramic	AC

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PC I/F UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C8206	9NK001-42160	J	10	6.3V	Ceramic	AD
C8207	9NK001-42122	J	180p	50V	Ceramic	AC
C8208	9NK001-42122	J	180p	50V	Ceramic	AC
C8209	9NK001-42122	J	180p	50V	Ceramic	AC
C8210	9NK001-42160	J	10	6.3V	Ceramic	AD
C8211	9NK001-42123	J	330p	50V	Ceramic	AD
C8212	9NK001-42123	J	330p	50V	Ceramic	AD
C8213	9NK001-42123	J	330p	50V	Ceramic	AD
C8214	9NK001-42123	J	330p	50V	Ceramic	AD
C8215	9NK001-42123	J	330p	50V	Ceramic	AD
C8216	9NK001-42157	J	0.1	25V	Ceramic	AD
C8217	9NK001-42113	J	4.7	10V	Ceramic	AD
C8218	9NK001-42157	J	0.1	25V	Ceramic	AD
C8220	9NK001-40166	J	100	6.3V	Electrolytic	AF
C8221	9NK001-42156	J	1	10V	Ceramic	AD
C8222	9NK001-42156	J	1	10V	Ceramic	AD
C8223	9NK001-42156	J	1	10V	Ceramic	AD
C8224	9NK001-42156	J	1	10V	Ceramic	AD
C8225	9NK001-42156	J	1	10V	Ceramic	AD
C8226	9NK001-42157	J	0.1	25V	Ceramic	AD
C8227	9NK001-42157	J	0.1	25V	Ceramic	AD
C8228	9NK001-42156	J	1	10V	Ceramic	AD
C8229	9NK001-42156	J	1	10V	Ceramic	AD
C8230	9NK001-42157	J	0.1	25V	Ceramic	AD
C8231	9NK001-42157	J	0.1	25V	Ceramic	AD
C8232	9NK001-42156	J	1	10V	Ceramic	AD
C8233	9NK001-42156	J	1	10V	Ceramic	AD
C8234	9NK001-42156	J	1	10V	Ceramic	AD
C8235	9NK001-42156	J	1	10V	Ceramic	AD
C8236	9NK001-42156	J	1	10V	Ceramic	AD
C8237	9NK001-42156	J	1	10V	Ceramic	AD
C8238	9NK001-42157	J	0.1	25V	Ceramic	AD
C8239	9NK001-42157	J	0.1	25V	Ceramic	AD
C8240	9NK001-42156	J	1	10V	Ceramic	AD
C8241	9NK001-42157	J	0.1	25V	Ceramic	AD
C8242	9NK001-42156	J	1	10V	Ceramic	AD
C8243	9NK001-42156	J	1	10V	Ceramic	AD
C8244	9NK001-42157	J	0.1	25V	Ceramic	AD
C8245	9NK001-42156	J	1	10V	Ceramic	AD
C8246	9NK001-42157	J	0.1	25V	Ceramic	AD
C8247	9NK001-42157	J	0.1	25V	Ceramic	AD
C8248	9NK001-42157	J	0.1	25V	Ceramic	AD
C8249	9NK001-42156	J	1	10V	Ceramic	AD
C8250	9NK001-42157	J	0.1	25V	Ceramic	AD
C8251	9NK001-42157	J	0.1	25V	Ceramic	AD
C8252	9NK001-42157	J	0.1	25V	Ceramic	AD
C8253	9NK001-42157	J	0.1	25V	Ceramic	AD
C8254	9NK001-42157	J	0.1	25V	Ceramic	AD
C8255	9NK001-42156	J	1	10V	Ceramic	AD
C8256	9NK001-42157	J	0.1	25V	Ceramic	AD
C8257	9NK001-42157	J	0.1	25V	Ceramic	AD
C8258	9NK001-42157	J	0.1	25V	Ceramic	AD
C8259	9NK001-42156	J	1	10V	Ceramic	AD
C8260	9NK001-42157	J	0.1	25V	Ceramic	AD
C8261	9NK001-42157	J	0.1	25V	Ceramic	AD
C8262	9NK001-42157	J	0.1	25V	Ceramic	AD
C8263	9NK001-42157	J	0.1	25V	Ceramic	AD
C8264	9NK001-42157	J	0.1	25V	Ceramic	AD
C8265	9NK001-42157	J	0.1	25V	Ceramic	AD
C8266	9NK001-42157	J	0.1	25V	Ceramic	AD
C8267	9NK001-42157	J	0.1	25V	Ceramic	AD
C8268	9NK001-42157	J	0.1	25V	Ceramic	AD
C8269	9NK001-42157	J	0.1	25V	Ceramic	AD
C8270	9NK001-42157	J	0.1	25V	Ceramic	AD
C8271	9NK001-42157	J	0.1	25V	Ceramic	AD
C8272	9NK001-40166	J	100	6.3V	Electrolytic	AF
C8273	9NK001-42156	J	1	10V	Ceramic	AD
C8275	9NK001-42160	J	10	6.3V	Ceramic	AD
C8277	9NK001-42157	J	0.1	25V	Ceramic	AD
C8278	9NK001-40166	J	100	6.3V	Electrolytic	AF
C8279	9NK001-40170	J	150	4V	NP	AK
C8281	9NK001-42157	J	0.1	25V	Ceramic	AD
C8282	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8283	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8284	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8285	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8286	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8287	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8288	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8289	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8290	9NK001-42157	J	0.1	25V	Ceramic	AD
C8291	9NK001-42157	J	0.1	25V	Ceramic	AD
C8292	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8293	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8294	9NK001-42157	J	0.1	25V	Ceramic	AD
C8295	9NK001-42157	J	0.1	25V	Ceramic	AD
C8296	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8297	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8298	9NK001-42157	J	0.1	25V	Ceramic	AD
C8299	9NK001-42157	J	0.1	25V	Ceramic	AD
C8300	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8301	9NK001-42157	J	0.1	25V	Ceramic	AD
C8302	9NK001-42157	J	0.1	25V	Ceramic	AD
C8303	9NK001-42157	J	0.1	25V	Ceramic	AD
C8304	9NK001-42157	J	0.1	25V	Ceramic	AD
C8305	9NK001-42156	J	1	10V	Ceramic	AD
C8306	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8307	9NK001-42157	J	0.1	25V	Ceramic	AD
C8308	9NK001-42157	J	0.1	25V	Ceramic	AD
C8309	9NK001-42157	J	0.1	25V	Ceramic	AD
C8310	9NK001-42157	J	0.1	25V	Ceramic	AD
C8311	9NK001-42157	J	0.1	25V	Ceramic	AD
C8312	9NK001-42156	J	1	10V	Ceramic	AD
C8313	9NK001-42157	J	0.1	25V	Ceramic	AD
C8314	9NK001-42157	J	0.1	25V	Ceramic	AD
C8315	9NK001-42157	J	0.1	25V	Ceramic	AD
C8316	9NK001-42157	J	0.1	25V	Ceramic	AD
C8317	9NK001-42187	J	4.7	6.3V	Ceramic	AD
C8318	9NK001-42157	J	0.1	25V	Ceramic	AD
C8320	9NK001-42157	J	0.1	25V	Ceramic	AD
C8323	9NK001-42157	J	0.1	25V	Ceramic	AD
C8324	9NK001-42157	J	0.1	25V	Ceramic	AD
C8325	9NK001-42157	J	0.1	25V	Ceramic	AD
C8326	9NK001-42157	J	0.1	25V	Ceramic	AD
C8327	9NK001-42157	J	0.1	25V	Ceramic	AD
C8328	9NK001-42157	J	0.1	25V	Ceramic	AD
C8329	9NK001-42157	J	0.1	25V	Ceramic	AD
C8330	9NK001-42157	J	0.1	25V	Ceramic	AD
C8331	9NK001-42157	J	0.1	25V	Ceramic	AD
C8332	9NK001-42157	J	0.1	25V	Ceramic	AD
C8333	9NK001-42157	J	0.1	25V	Ceramic	AD
C8334	9NK001-42157	J	0.1	25V	Ceramic	AD
C8335	9NK001-42157	J	0.1	25V	Ceramic	AD
C8336	9NK001-42156	J	1	10V	Ceramic	AD
C8337	9NK001-42157	J	0.1	25V	Ceramic	AD
C8338	9NK001-42157	J	0.1	25V	Ceramic	AD
C8339	9NK001-42157	J	0.1	25V	Ceramic	AD
C8340	9NK001-42157	J	0.1	25V	Ceramic	AD
C8342	9NK001-42157	J	0.1	25V	Ceramic	AD
C8343	9NK001-42157	J	0.1	25V	Ceramic	AD
C8345	9NK001-42156	J	1	10V	Ceramic	AD
C8346	9NK001-42157	J	0.1	25V	Ceramic	AD
C8347	9NK001-42157	J	0.1	25V	Ceramic	AD
C8348	9NK001-42157	J	0.1	25V	Ceramic	AD
C8349	9NK001-42156	J	1	10V	Ceramic	AD
C8350	9NK001-42157	J	0.1	25V	Ceramic	AD
C8351	9NK001-42188	J	10	6.3V	Ceramic	AF
C8352	9NK001-42157	J	0.1	25V	Ceramic	AD
C8353	9NK001-42160	J	10	6.3V	Ceramic	AD
C8354	9NK001-42157	J	0.1	25V	Ceramic	AD
C8355	9NK001-42157	J	0.1	25V	Ceramic	AD
C8356	9NK001-42157	J	0.1	25V	Ceramic	AD
C8357	9NK001-42157	J	0.1	25V	Ceramic	AD
C8358	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8359	9NK001-40165	J	22	6.3V	Electrolytic	AF
C8362	9NK001-42156	J	1	10V	Ceramic	AD
C8363	9NK001-42157	J	0.1	25V	Ceramic	AD
C8364	9NK001-42157	J	0.1	25V	Ceramic	AD

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Ref. No.	Part No.	★			Description	Code
C8365	9NK001-42157	J	0.1	25V	Ceramic	AD
C8366	9NK001-40168	J	47	6.3V	Electrolytic	AF
C8367	9NK001-42157	J	0.1	25V	Ceramic	AD

RESISTORS

Ref. No.	Part No.	★			Description	Code
FL8001	9NK001-50424	J	10	1/16W	Metal Oxide	AC
FL8006	9NK001-50441	J	0	1/16W	Metal Oxide	AC
FL8007	9NK001-50441	J	0	1/16W	Metal Oxide	AC
FL8008	9NK001-50441	J	0	1/16W	Metal Oxide	AC
FL8009	9NK001-50441	J	0	1/16W	Metal Oxide	AC
FL8010	9NK001-51067	J	56	1/16W	Array	AC
FL8011	9NK001-51067	J	56	1/16W	Array	AC
FL8012	9NK001-51067	J	56	1/16W	Array	AC
FL8013	9NK001-51067	J	56	1/16W	Array	AC
FL8014	9NK001-51067	J	56	1/16W	Array	AC
FL8015	9NK001-51067	J	56	1/16W	Array	AC
FL8016	9NK001-51067	J	56	1/16W	Array	AC
FL8017	9NK001-51067	J	56	1/16W	Array	AC
R8001	9NK001-50406	J	910	1/16W	Metal Oxide	AC
R8002	9NK001-50423	J	2.15k	1/16W	Metal Oxide	AC
R8003	9NK001-51064	J	10k	1/16W	Array	AF
R8004	9NK001-51064	J	10k	1/16W	Array	AF
R8005	9NK001-50433	J	2.2k	1/16W	Metal Oxide	AC
R8006	9NK001-51064	J	10k	1/16W	Array	AF
R8007	9NK001-51064	J	10k	1/16W	Array	AF
R8009	9NK001-50435	J	150	1/16W	Metal Oxide	AC
R8011	9NK001-50410	J	4.7k	1/16W	Metal Oxide	AC
R8012	9NK001-51064	J	10k	1/16W	Array	AF
R8013	9NK001-51066	J	6.8k	1/16W	Array	AF
R8015	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8017	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8018	9NK001-50421	J	1.8k	1/16W	Metal Oxide	AC
R8019	9NK001-51066	J	6.8k	1/16W	Array	AF
R8021	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8022	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8023	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8024	9NK001-51062	J	100	1/16W	Array	AF
R8025	9NK001-51062	J	100	1/16W	Array	AF
R8026	9NK001-51062	J	100	1/16W	Array	AF
R8027	9NK001-51062	J	100	1/16W	Array	AF
R8028	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8029	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8030	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8031	9NK001-51065	J	22	1/16W	Array	AF
R8034	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8035	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8036	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8037	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8038	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8040	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8043	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8045	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8048	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8049	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8051	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8052	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8053	9NK001-51062	J	100	1/16W	Array	AF
R8055	9NK001-51062	J	100	1/16W	Array	AF
R8056	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8058	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8059	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8060	9NK001-50428	J	33	1/16W	Metal Oxide	AC
R8061	9NK001-50428	J	33	1/16W	Metal Oxide	AC
R8062	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8064	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8065	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8070	9NK001-50431	J	910	1/16W	Metal Oxide	AC
R8071	9NK001-50431	J	910	1/16W	Metal Oxide	AC
R8072	9NK001-50421	J	1.8k	1/16W	Metal Oxide	AC
R8073	9NK001-51062	J	100	1/16W	Array	AF
R8074	9NK001-51062	J	100	1/16W	Array	AF
R8075	9NK001-51062	J	100	1/16W	Array	AF
R8076	9NK001-51062	J	100	1/16W	Array	AF
R8077	9NK001-51062	J	100	1/16W	Array	AF
R8078	9NK001-51062	J	100	1/16W	Array	AF
R8079	9NK001-51062	J	100	1/16W	Array	AF
R8080	9NK001-51062	J	100	1/16W	Array	AF
R8081	9NK001-51062	J	100	1/16W	Array	AF
R8082	9NK001-50421	J	1.8k	1/16W	Metal Oxide	AC
R8083	9NK001-50432	J	1.5k	1/16W	Metal Oxide	AC
R8084	9NK001-50432	J	1.5k	1/16W	Metal Oxide	AC
R8085	9NK001-50434	J	560	1/16W	Metal Oxide	AC
R8086	9NK001-50434	J	560	1/16W	Metal Oxide	AC
R8087	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8088	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8089	9NK001-50429	J	390	1/16W	Metal Oxide	AC
R8090	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8091	9NK001-50436	J	150	1/16W	Metal Oxide	AC
R8092	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8093	9NK001-50437	J	47	1/16W	Metal Oxide	AC
R8094	9NK001-50438	J	82	1/16W	Metal Oxide	AC
R8095	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8096	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8097	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8098	9NK001-50439	J	470	1/16W	Metal Oxide	AC
R8099	9NK001-50440	J	3.9k	1/16W	Metal Oxide	AC
R8100	9NK001-50408	J	1k	1/16W	Metal Oxide	AC
R8101	9NK001-50408	J	1k	1/16W	Metal Oxide	AC
R8102	9NK001-50408	J	1k	1/16W	Metal Oxide	AC
R8104	9NK001-50409	J	12k	1/16W	Metal Oxide	AC
R8105	9NK001-50408	J	1k	1/16W	Metal Oxide	AC
R8106	9NK001-50436	J	150	1/16W	Metal Oxide	AC
R8107	9NK001-50439	J	470	1/16W	Metal Oxide	AC
R8112	9NK001-50411	J	47	1/16W	Metal Oxide	AC
R8114	9NK001-50412	J	33k	1/16W	Metal Oxide	AC
R8115	9NK001-50413	J	1.1k	1/16W	Metal Oxide	AC
R8116	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8119	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8120	9NK001-50414	J	820	1/16W	Metal Oxide	AC
R8122	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8123	9NK001-50415	J	75	1/10W	Metal Oxide	AC
R8124	9NK001-50415	J	75	1/10W	Metal Oxide	AC
R8125	9NK001-50415	J	75	1/10W	Metal Oxide	AC
R8126	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8129	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8133	9NK001-50416	J	22	1/16W	Metal Oxide	AC
R8134	9NK001-50417	J	6.8	1/16W	Metal Oxide	AC
R8135	9NK001-50447	J	820	1/10W	Metal Oxide	AC
R8136	9NK001-50416	J	22	1/16W	Metal Oxide	AC
R8137	9NK001-50417	J	6.8	1/16W	Metal Oxide	AC
R8138	9NK001-50447	J	820	1/10W	Metal Oxide	AC
R8139	9NK001-50416	J	22	1/16W	Metal Oxide	AC
R8140	9NK001-50417	J	6.8	1/16W	Metal Oxide	AC
R8141	9NK001-50447	J	820	1/10W	Metal Oxide	AC
R8142	9NK001-50417	J	6.8	1/16W	Metal Oxide	AC
R8143	9NK001-50416	J	22	1/16W	Metal Oxide	AC
R8144	9NK001-50417	J	6.8	1/16W	Metal Oxide	AC
R8145	9NK001-50416	J	22	1/16W	Metal Oxide	AC
R8146	9NK001-50417	J	6.8	1/16W	Metal Oxide	AC
R8147	9NK001-50416	J	22	1/16W	Metal Oxide	AC
R8148	9NK001-50443	J	68	1/10W	Metal Oxide	AC
R8149	9NK001-50443	J	68	1/10W	Metal Oxide	AC
R8150	9NK001-50443	J	68	1/10W	Metal Oxide	AC
R8151	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8153	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8155	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8157	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8158	9NK001-50418	J	3.3k	1/16W	Metal Oxide	AC
R8159	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8160	9NK001-51064	J	10k	1/16W	Array	AF
R8161	9NK001-50439	J	470	1/16W	Metal Oxide	AC
R8162	9NK001-50410	J	4.7k	1/16W	Metal Oxide	AC
R8163	9NK001-50410	J	4.7k	1/16W	Metal Oxide	AC
R8164	9NK001-50419	J	390	1/16W	Metal Oxide	AC
R8165	9NK001-50445	J	150	1/4W	Metal Oxide	AC
R8166	9NK001-50442	J	0	1/10W	Metal Oxide	AC

9NK5600204233
PC I/F UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
R8167	9NK001-50442	J	0	1/10W	Metal Oxide	AC
R8168	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8169	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8170	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8171	9NK001-50420	J	47k	1/16W	Metal Oxide	AC
R8172	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8173	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8174	9NK001-51064	J	10k	1/16W	Array	AF
R8175	9NK001-51066	J	6.8k	1/16W	Array	AF
R8177	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8179	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8180	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8181	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8182	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8184	9NK001-50439	J	470	1/16W	Metal Oxide	AC
R8185	9NK001-50408	J	1k	1/16W	Metal Oxide	AC
R8186	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8187	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8190	9NK001-50406	J	910	1/16W	Metal Oxide	AC
R8191	9NK001-50422	J	2k	1/16W	Metal Oxide	AC
R8192	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8193	9NK001-51059	J	56	1/16W	Array	AF
R8195	9NK001-51060	J	15	1/16W	Array	AF
R8196	9NK001-51061	J	82	1/16W	Array	AF
R8197	9NK001-51060	J	15	1/16W	Array	AF
R8198	9NK001-51059	J	56	1/16W	Array	AF
R8199	9NK001-51060	J	15	1/16W	Array	AF
R8200	9NK001-51061	J	82	1/16W	Array	AF
R8201	9NK001-51060	J	15	1/16W	Array	AF
R8202	9NK001-51060	J	15	1/16W	Array	AF
R8203	9NK001-51061	J	82	1/16W	Array	AF
R8204	9NK001-51059	J	56	1/16W	Array	AF
R8205	9NK001-51060	J	15	1/16W	Array	AF
R8206	9NK001-51060	J	15	1/16W	Array	AF
R8207	9NK001-51061	J	82	1/16W	Array	AF
R8208	9NK001-51059	J	56	1/16W	Array	AF
R8209	9NK001-51060	J	15	1/16W	Array	AF
R8210	9NK001-51060	J	15	1/16W	Array	AF
R8211	9NK001-51061	J	82	1/16W	Array	AF
R8212	9NK001-51059	J	56	1/16W	Array	AF
R8213	9NK001-51060	J	15	1/16W	Array	AF
R8214	9NK001-51060	J	15	1/16W	Array	AF
R8215	9NK001-51061	J	82	1/16W	Array	AF
R8216	9NK001-51060	J	15	1/16W	Array	AF
R8217	9NK001-51061	J	82	1/16W	Array	AF
R8218	9NK001-51060	J	15	1/16W	Array	AF
R8219	9NK001-51061	J	82	1/16W	Array	AF
R8220	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8221	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8222	9NK001-50424	J	10	1/16W	Metal Oxide	AC
R8223	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8225	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8226	9NK001-50425	J	15	1/16W	Metal Oxide	AC
R8227	9NK001-50426	J	82	1/16W	Metal Oxide	AC
R8232	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8235	9NK001-50430	J	10k	1/16W	Metal Oxide	AC
R8238	9NK001-51059	J	56	1/16W	Array	AF
R8239	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8241	9NK001-51059	J	56	1/16W	Array	AF
R8242	9NK001-51059	J	56	1/16W	Array	AF
R8243	9NK001-51063	J	47	1/16W	Array	AF
R8244	9NK001-51059	J	56	1/16W	Array	AF
R8245	9NK001-51063	J	47	1/16W	Array	AF
R8246	9NK001-51059	J	56	1/16W	Array	AF
R8247	9NK001-51063	J	47	1/16W	Array	AF
R8248	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8249	9NK001-51063	J	47	1/16W	Array	AF
R8250	9NK001-51063	J	47	1/16W	Array	AF
R8251	9NK001-51063	J	47	1/16W	Array	AF
R8252	9NK001-51063	J	47	1/16W	Array	AF
R8253	9NK001-51063	J	47	1/16W	Array	AF
R8254	9NK001-50427	J	56	1/16W	Metal Oxide	AC
R8260	9NK001-51066	J	6.8k	1/16W	Array	AF
R8261	9NK001-51066	J	6.8k	1/16W	Array	AF
R8262	9NK001-51066	J	6.8k	1/16W	Array	AF
R8263	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8264	9NK001-50441	J	0	1/16W	Metal Oxide	AC
R8265	9NK001-50427	J	56	1/16W	Metal Oxide	AC
R8268	9NK001-50407	J	100	1/16W	Metal Oxide	AC
R8271	9NK001-50441	J	0	1/16W	Metal Oxide	AC

SWITCH

SW8001	9NK001-70012	J	Slide Switch	AN

MISCELLANEOUS PARTS

FB8001	9NK001-81099	J	Ferrite Bead	AE
FL8002	9NK001-81098	J	Ferrite Bead	AE
FL8003	9NK001-81098	J	Ferrite Bead	AE
FL8004	9NK001-81098	J	Ferrite Bead	AE
FL8005	9NK001-81098	J	Ferrite Bead	AE
FL8018	9NK001-81098	J	Ferrite Bead	AE
FL8019	9NK001-81098	J	Ferrite Bead	AE
L8018	9NK001-81062	J	Ferrite Bead	AG
L8019	9NK001-81062	J	Ferrite Bead	AG
L8024	9NK001-81062	J	Ferrite Bead	AG
L8025	9NK001-81062	J	Ferrite Bead	AG
L8026	9NK001-81097	J	Ferrite Bead	AE
L8028	9NK001-81069	J	Ferrite Bead	AF
L8029	9NK001-81062	J	Ferrite Bead	AG
L8030	9NK001-81062	J	Ferrite Bead	AG
L8031	9NK001-81062	J	Ferrite Bead	AG
L8032	9NK001-81062	J	Ferrite Bead	AG
L8033	9NK001-81062	J	Ferrite Bead	AG
P8001	9NK001-60138	J	Connector	AX
SC8001	9NK001-60139	J	Connector	AV
SC8002	9NK001-60140	J	Connector	AU
SC8003	9NK001-60141	J	Connector	AX
SC8004	9NK001-60142	J	Connector	AX

Ref. No.	Part No.	★	Description	Code

9NK5600204255
AUDIO UNIT

INTEGRATED CIRCUIT

IC1501	9NK2530100316	J	Stereo Card, TDA1517	AM

TRANSISTORS

Q1501	9NKM551510036	J	2SD1664	AD
Q1502	9NKM551510036	J	2SD1664	AD
Q1503	9NKM522000405	J	MMBT3904	AB

DIODES

D1501	9NK0920990416	J	EV18N	AC
D1502	9NK0920990416	J	EV18N	AC

CAPACITORS

C1501	9NK1547691200	J	10	16V	Ceramic	AB
C1503	9NKB121021500	J	1000	16V	Electrolytic	AB
C1504	9NK1517658000	J	0.1	50V	Ceramic	AB
C1505	9NKB121021500	J	1000	16V	Electrolytic	AB
C1506	9NKB144711500	J	470	25V	Electrolytic	AB
C1507	9NK1547691200	J	10	16V	Ceramic	AB
C1508	9NKF124701333	J	47	16V	Electrolytic	AC
C1512	9NKF121011333	J	100	16V	Electrolytic	AC

RESISTORS

FB1501	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R1501	9NK0333000500	J	0	1W	Metal Oxide	AB
R1502	9NK0333000500	J	0	1W	Metal Oxide	AB
R1503	9NK0343821300	J	820	1/10W	Metal Oxide	AB
R1504	9NK0343821300	J	820	1/10W	Metal Oxide	AB
R1505	9NK0333000500	J	0	1W	Metal Oxide	AB
R1506	9NK0333000500	J	0	1W	Metal Oxide	AB
R1507	9NK0343392300	J	3.9k	1/10W	Metal Oxide	AB
R1508	9NK0341065300	J	18k	1/10W	Metal Oxide	AB
R1509	9NK0343392300	J	3.9k	1/10W	Metal Oxide	AB
R1510	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R1511	9NK0341055300	J	6.8k	1/10W	Metal Oxide	AB
R1513	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R1514	9NK0333000500	J	0	1W	Metal Oxide	AB
R1515	9NK0333000500	J	0	1W	Metal Oxide	AB
R1516	9NK0333000500	J	0	1W	Metal Oxide	AB
R1517	9NK0333000500	J	0	1W	Metal Oxide	AB
R1518	9NK0343183300	J	18k	1/10W	Metal Oxide	AB
R1519	9NK0341077300	J	47k	1/10W	Metal Oxide	AB

MISCELLANEOUS PARTS

CN1501	9NK3071296834	J	Connector, 2pin	AB
CN1502	9NK3071296934	J	Connector, 3pin	AB
CN1503	9NK3070070600	J	Connector, 9pin	AF
⚠ TH1501	9NK0841110502	J	Fuse 3A/125V	AD

Ref. No.	Part No.	★	Description	Code

9NK5600204254
TERMINAL UNIT

INTEGRATED CIRCUITS

IC401	9NK2530224474	J	Video SW With 6db Amp, NJM2245M	AM
IC402	9NK2530224474	J	Video SW With 6db Amp, NJM2245M	AM
IC403	9NK2530224474	J	Video SW With 6db Amp, NJM2245M	AM
IC404	9NK2530224474	J	Video SW With 6db Amp, NJM2245M	AM
IC406	9NK2530224274	J	3I/p Video Sw+75Ohm Driver, NJM2244M	AM
IC407	9NK2600134434	J	Dual Analog Switch, SN74LVC2G66DCTR	AE
IC2901	9NK2540086207	J	8Bit I/O Expander, M62320FP	AL
IC3001	9NK2600123234	J	Dual Bus Buffer, TC7W125FU	AD
IC3002	9NK2600212034	J	Dual 3-S InV Out Bus Buf, TC7WT240U	AF
IC3003	9NK2610099337	J	EEPROM, ST24LC21B	
IC3004	9NK2600212034	J	Dual 3-S InV Out Bus Buf, TC7WT240U	AF
IC3005	9NK2600022207	J	Hex Inverter, N74F04DT	AE
IC3007	9NK2600100253	J	Triple 2:1 Multiplexers, AD8185	BA
IC3008	9NK2510250011	J	Converter Sw, LM2664	AL

TRANSISTORS

Q401	9NKM532500036	J	DTC114EUA	AB
Q402	9NKM532500036	J	DTC114EUA	AB
Q403	9NKM532500036	J	DTC114EUA	AB
Q404	9NKM532500036	J	DTC114EUA	AB
Q405	9NKN522000217	J	MMBT3906	AB
Q406	9NKM522000405	J	MMBT3904	AB
Q407	9NKN522000217	J	MMBT3906	AB
Q408	9NKN522000217	J	MMBT3906	AB
Q409	9NKM522000405	J	MMBT3904	AB
Q410	9NKN522000217	J	MMBT3906	AB
Q411	9NKM532500036	J	DTC114EUA	AB
Q412	9NKM522000405	J	MMBT3904	AB
Q413	9NKN522000217	J	MMBT3906	AB
Q414	9NKM522000405	J	MMBT3904	AB
Q415	9NKM522000405	J	MMBT3904	AB
Q416	9NKN522000217	J	MMBT3906	AB
Q417	9NKM522000405	J	MMBT3904	AB
Q418	9NKM522000405	J	MMBT3904	AB
Q3001	9NKM532500236	J	DTC114EUA	AB
Q5501	9NKM532500236	J	DTC114EUA	AB
Q5502	9NKM532500236	J	DTC114EUA	AB

DIODES

D403	9NKJ840340211	J	Zener Diode 5.49-5.73V, HZU5.6B2	AC
D429	9NK0920990416	J	EV18N	AC
D430	9NK0920990416	J	EV18N	AC
D431	9NK0920990416	J	EV18N	AC
D432	9NK0920990416	J	EV18N	AC
D436	9NK0920990416	J	EV18N	AC
D437	9NK0920990416	J	EV18N	AC
D441	9NK0920990416	J	EV18N	AC
D442	9NK0920990416	J	EV18N	AC
D443	9NK0920990416	J	EV18N	AC
D444	9NK0920990416	J	EV18N	AC
D447	9NK0920990416	J	EV18N	AC
D448	9NK0920990416	J	EV18N	AC
D449	9NK0920990416	J	EV18N	AC
D450	9NK0920990416	J	EV18N	AC
D451	9NK0920990416	J	EV18N	AC
D452	9NK0920990416	J	EV18N	AC
D453	9NK0920990416	J	EV18N	AC
D454	9NK0920990416	J	EV18N	AC
D455	9NK0920990416	J	EV18N	AC

9NK5600204254
TERMINAL UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
D456	9NK0920990416	J	EV18N	AC
D457	9NK0920990416	J	EV18N	AC
D458	9NK0920990416	J	EV18N	AC
D459	9NK0920990416	J	EV18N	AC
D460	9NK0920990416	J	EV18N	AC
D461	9NK0920990416	J	EV18N	AC
D462	9NK0920990416	J	EV18N	AC
D463	9NK0920990416	J	EV18N	AC
D3005	9NKK520700207	J	BAV99	AB
D3006	9NKK520700207	J	BAV99	AB
D3007	9NKK520700207	J	BAV99	AB
D3008	9NKK520700207	J	BAV99	AB
D3009	9NKK520700207	J	BAV99	AB
D3011	9NKK520700207	J	BAV99	AB
D3012	9NKK520700207	J	BAV99	AB
D3013	9NKK520700207	J	BAV99	AB
D3015	9NKK520700207	J	BAV99	AB
D3019	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D3020	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D3021	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB
D3022	9NKJ841820007	J	Zener Diode 12V, PDZ12B	AB

COILS AND TRANSFORMER

FL3001	9NK2921115908	J	Ferrite Bead	AE
FL3002	9NK2921115908	J	Ferrite Bead	AE
FL3003	9NK2921115908	J	Ferrite Bead	AE
FL3004	9NK2921115908	J	Ferrite Bead	AE
FL3005	9NK2921115908	J	Ferrite Bead	AE
FL3006	9NK2909913706	J	Filter	AF
FL3007	9NK2909913706	J	Filter	AF
FL3008	9NK2921115908	J	Ferrite Bead	AE
FL3009	9NK2909913706	J	Filter	AF
FL401	9NK2909913606	J	Filter	AF
FL402	9NK2909913306	J	Filter	AD
FL403	9NK2909913306	J	Filter	AD
L3001	9NK2923220212	J	Inductor, 10µH	AB
L3002	9NK2923220212	J	Inductor, 10µH	AB
L3003	9NK2923220212	J	Inductor, 10µH	AB
L3004	9NK2923220212	J	Inductor, 10µH	AB
L3005	9NK2923220212	J	Inductor, 10µH	AB
T9401	9NK2817387646	J	Transformer	AP

CAPACITORS

C403	9NK1511530000	J	100p	50V	Ceramic	AB
C404	9NK1511530000	J	100p	50V	Ceramic	AB
C405	9NK1511530000	J	100p	50V	Ceramic	AB
C406	9NK1511530000	J	100p	50V	Ceramic	AB
C407	9NK1511530000	J	100p	50V	Ceramic	AB
C408	9NK1511530000	J	100p	50V	Ceramic	AB
C409	9NK1511530000	J	100p	50V	Ceramic	AB
C410	9NK1511530000	J	100p	50V	Ceramic	AB
C411	9NKF122201233	J	22	16V	Electrolytic	AB
C412	9NKF121002103	J	10	16V	Elect.(NP)	AD
C413	9NKF121002103	J	10	16V	Elect.(NP)	AD
C414	9NKF121002103	J	10	16V	Elect.(NP)	AD
C415	9NKF141001233	J	10	25V	Electrolytic	AC
C416	9NKF141001233	J	10	25V	Electrolytic	AC
C417	9NKF121002103	J	10	16V	Elect.(NP)	AD
C418	9NK1517658000	J	0.1	50V	Ceramic	AB
C419	9NKF122201233	J	22	16V	Electrolytic	AB
C420	9NKF121002103	J	10	16V	Elect.(NP)	AD
C421	9NKF121002103	J	10	16V	Elect.(NP)	AD
C422	9NKF121002103	J	10	16V	Elect.(NP)	AD
C423	9NKF121002103	J	10	16V	Elect.(NP)	AD
C424	9NK1517658000	J	0.1	50V	Ceramic	AB
C425	9NKF121002103	J	10	16V	Elect.(NP)	AD
C426	9NK1517658000	J	0.1	50V	Ceramic	AB
C427	9NKF121002103	J	10	16V	Elect.(NP)	AD
C428	9NK1517658000	J	0.1	50V	Ceramic	AB
C429	9NK1511445000	J	1000p	50V	Ceramic	AB
C430	9NKF122204010	J	10	25V	Electrolytic	AK
C431	9NK1517658000	J	0.1	50V	Ceramic	AB
C432	9NKF144701433	J	47	25V	Electrolytic	AC
C433	9NK1517658000	J	0.1	50V	Ceramic	AB
C434	9NK1517658000	J	0.1	50V	Ceramic	AB
C435	9NK1517658000	J	0.1	50V	Ceramic	AB
C436	9NK1517658000	J	0.1	50V	Ceramic	AB
C442	9NK1517658000	J	0.1	50V	Ceramic	AB
C444	9NK1517658000	J	0.1	50V	Ceramic	AB
C445	9NKF121002103	J	10	16V	Elect.(NP)	AD
C446	9NKF121002103	J	10	16V	Elect.(NP)	AD
C447	9NKF121002103	J	10	16V	Elect.(NP)	AD
C448	9NKF121002103	J	10	16V	Elect.(NP)	AD
C449	9NKF121002103	J	10	16V	Elect.(NP)	AD
C450	9NKF121002103	J	10	16V	Elect.(NP)	AD
C451	9NKF124701333	J	47	16V	Electrolytic	AC
C452	9NK1517658000	J	0.1	50V	Ceramic	AB
C453	9NK1547691200	J	10	16V	Ceramic	AB
C455	9NK1557667100	J	1	25V	Ceramic	AB
C457	9NK1557667100	J	1	25V	Ceramic	AB
C3001	9NK1511512000	J	18p	50V	Ceramic	AB
C3002	9NK1511512000	J	18p	50V	Ceramic	AB
C3003	9NK1511512000	J	18p	50V	Ceramic	AB
C3004	9NK1511512000	J	18p	50V	Ceramic	AB
C3005	9NK1511512000	J	18p	50V	Ceramic	AB
C3006	9NK1511512000	J	18p	50V	Ceramic	AB
C3007	9NKF141001233	J	10	25V	Electrolytic	AC
C3008	9NK1517658000	J	0.1	50V	Ceramic	AB
C3009	9NK1517658000	J	0.1	50V	Ceramic	AB
C3010	9NKF144701433	J	47	25V	Electrolytic	AC
C3011	9NK1512454000	J	0.01	50V	Ceramic	AB
C3012	9NKF141001233	J	10	25V	Electrolytic	AC
C3013	9NK1517658000	J	0.1	50V	Ceramic	AB
C3014	9NK1517658000	J	0.1	50V	Ceramic	AB
C3015	9NKE024702233	J	47	6.3V	Electrolytic	AD
C3016	9NK1512454000	J	0.01	50V	Ceramic	AB
C3017	9NK1511445000	J	1000p	50V	Ceramic	AB
C3018	9NKF122201233	J	22	16V	Electrolytic	AB
C3019	9NKE024702233	J	47	6.3V	Electrolytic	AD
C3020	9NK1512454000	J	0.01	50V	Ceramic	AB
C3021	9NK1517658000	J	0.1	50V	Ceramic	AB
C3022	9NKE024702233	J	47	6.3V	Electrolytic	AD
C3023	9NK1512454000	J	0.01	50V	Ceramic	AB
C3027	9NKF121011333	J	100	16V	Electrolytic	AC
C3028	9NK1517658000	J	0.1	50V	Ceramic	AB
C3029	9NKF121011333	J	100	16V	Electrolytic	AC
C3030	9NKE024702233	J	47	6.3V	Electrolytic	AD
C3031	9NK1512454000	J	0.01	50V	Ceramic	AB
C3032	9NKE024702233	J	47	6.3V	Electrolytic	AD
C3033	9NKF122201233	J	22	16V	Electrolytic	AB
C3034	9NK1517658000	J	0.1	50V	Ceramic	AB
C3035	9NK1517658000	J	0.1	50V	Ceramic	AB
C3038	9NK1512454000	J	0.01	50V	Ceramic	AB
C3039	9NKE024702233	J	47	6.3V	Electrolytic	AD
C3040	9NK1511445000	J	1000p	50V	Ceramic	AB
C3041	9NK1512454000	J	0.01	50V	Ceramic	AB
C3042	9NKF141001233	J	10	25V	Electrolytic	AC
C3043	9NK1547691200	J	10	16V	Ceramic	AB
C3044	9NK1547691200	J	10	16V	Ceramic	AB
C3045	9NKF141001233	J	10	25V	Electrolytic	AC
C5501	9NK1511530000	J	100p	50V	Ceramic	AB
C5502	9NK1511530000	J	100p	50V	Ceramic	AB
C9458	9NK1512454000	J	0.01	50V	Ceramic	AB
C9462	9NK1517658000	J	0.1	50V	Ceramic	AB

RESISTORS

R401	9NK0343123300	J	12k	1/10W	Metal Oxide	AB
R402	9NK0343123300	J	12k	1/10W	Metal Oxide	AB
R403	9NK0343123300	J	12k	1/10W	Metal Oxide	AB
R404	9NK0343123300	J	12k	1/10W	Metal Oxide	AB
R405	9NK0343105300	J	1M	1/10W	Metal Oxide	AB
R406	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R407	9NK0343224300	J	220k	1/10W	Metal Oxide	AB
R408	9NK0343105300	J	1M	1/10W	Metal Oxide	AB
R409	9NK0343224300	J	220k	1/10W	Metal Oxide	AB
R410	9NK0311379000	J	75	1/4W	Metal Oxide	AB

9NK5600204254
TERMINAL UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
R411	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R412	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R413	9NK0343123300	J	12k	1/10W	Metal Oxide	AB
R414	9NK0343123300	J	12k	1/10W	Metal Oxide	AB
R415	9NK0343182300	J	1.8k	1/10W	Metal Oxide	AB
R416	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R417	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R418	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R419	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R420	9NK0343182300	J	1.8k	1/10W	Metal Oxide	AB
R421	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R422	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R423	9NK0341062300	J	15k	1/10W	Metal Oxide	AB
R424	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R425	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R426	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R427	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R428	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R429	9NK0323568600	J	5.6	1/2W	Metal Oxide	AB
R430	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R431	9NK0343681300	J	680	1/10W	Metal Oxide	AB
R432	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R433	9NK0343681300	J	680	1/10W	Metal Oxide	AB
R434	9NK0343224300	J	220k	1/10W	Metal Oxide	AB
R435	9NK0343224300	J	220k	1/10W	Metal Oxide	AB
R436	9NK0341055300	J	6.8k	1/10W	Metal Oxide	AB
R437	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R438	9NK0343122300	J	1.2k	1/10W	Metal Oxide	AB
R439	9NK0343224300	J	220k	1/10W	Metal Oxide	AB
R440	9NK0343562300	J	5.6k	1/10W	Metal Oxide	AB
R441	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R442	9NK0341055300	J	6.8k	1/10W	Metal Oxide	AB
R443	9NK0341047300	J	2.7k	1/10W	Metal Oxide	AB
R444	9NK0343562300	J	5.6k	1/10W	Metal Oxide	AB
R445	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R446	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R447	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R448	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R449	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R450	9NK0341047300	J	2.7k	1/10W	Metal Oxide	AB
R451	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R452	9NK0323101600	J	100	1/2W	Metal Oxide	AB
R453	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R454	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R455	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R456	9NK0323101600	J	100	1/2W	Metal Oxide	AB
R457	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R458	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R460	9NK0343224300	J	220k	1/10W	Metal Oxide	AB
R462	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R463	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R464	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R465	9NK0343472300	J	4.7k	1/10W	Metal Oxide	AB
R467	9NK0343122300	J	1.2k	1/10W	Metal Oxide	AB
R468	9NK0343122300	J	1.2k	1/10W	Metal Oxide	AB
R469	9NK0341034300	J	330	1/10W	Metal Oxide	AB
R470	9NK0343100300	J	10	1/10W	Metal Oxide	AB
R482	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R483	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R485	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R486	9NK0343105300	J	1M	1/10W	Metal Oxide	AB
R487	9NK0343105300	J	1M	1/10W	Metal Oxide	AB
R488	9NK0343105300	J	1M	1/10W	Metal Oxide	AB
R491	9NK0343154300	J	150k	1/10W	Metal Oxide	AB
R492	9NK0343471300	J	470	1/10W	Metal Oxide	AB
R493	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R494	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R496	9NK0343154300	J	150k	1/10W	Metal Oxide	AB
R497	9NK0341087300	J	100k	1/10W	Metal Oxide	AB
R498	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R499	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R500	9NK0343393300	J	39k	1/10W	Metal Oxide	AB
R501	9NK0343471300	J	470	1/10W	Metal Oxide	AB
R502	9NK0343154300	J	150k	1/10W	Metal Oxide	AB
R503	9NK0341087300	J	100k	1/10W	Metal Oxide	AB
R504	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R2901	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2902	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2903	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2904	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2905	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2906	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R2907	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3003	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3004	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3005	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3006	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3007	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3008	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3009	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3011	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3012	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3013	9NK0343473300	J	47k	1/10W	Metal Oxide	AB
R3014	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3015	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3016	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3017	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R3018	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R3019	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3020	9NK0343101300	J	100	1/10W	Metal Oxide	AB
R3021	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3022	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3023	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R3024	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3026	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R3027	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R3028	9NK0343222300	J	2.2k	1/10W	Metal Oxide	AB
R3029	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R3030	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R3031	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R3033	9NK0343152300	J	1.5k	1/10W	Metal Oxide	AB
R3034	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3035	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3036	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3037	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R3038	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3042	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3043	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3045	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3046	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3047	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3048	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3049	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3052	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3053	9NK0311379000	J	75	1/4W	Metal Oxide	AB
R3057	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R3058	9NK0341034300	J	330	1/10W	Metal Oxide	AB
R5501	9NK0341084300	J	82k	1/10W	Metal Oxide	AB
R5502	9NK0341048300	J	3.3k	1/10W	Metal Oxide	AB
R5503	9NK0343154300	J	150k	1/10W	Metal Oxide	AB
R5505	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R5507	9NK0343102300	J	1k	1/10W	Metal Oxide	AB
R9401	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9402	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9403	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9404	9NK0313561000	J	560	1/4W	Metal Oxide	AB
R9405	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9411	9NK0313561000	J	560	1/4W	Metal Oxide	AB
R9412	9NK0343000300	J	0	1/10W	Metal Oxide	AB
R9421	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R9422	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R9423	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R9424	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R9425	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R9426	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R9427	9NK0343000100	J	0	1/8W	Metal Oxide	AB
R9428	9NK0343000100	J	0	1/8W	Metal Oxide	AB

Ref. No.	Part No.	★	Description	Code

9NK5600204254
TERMINAL UNIT (Continued)

R9429	9NK0343750300	J	75	1/10W	Metal Oxide	AB
R9430	9NK0343750300	J	75	1/10W	Metal Oxide	AB
R9431	9NK0343750300	J	75	1/10W	Metal Oxide	AB
R9432	9NK0343750300	J	75	1/10W	Metal Oxide	AB

MISCELLANEOUS PARTS

FB401	9NK2921174812	J	Ferrite Bead	AB
FB402	9NK2921174812	J	Ferrite Bead	AB
FB403	9NK2921174812	J	Ferrite Bead	AB
FB404	9NK2921174812	J	Ferrite Bead	AB
FB406	9NK2921174812	J	Ferrite Bead	AB
FB407	9NK2921174812	J	Ferrite Bead	AB
FB408	9NK2921174812	J	Ferrite Bead	AB
FB409	9NK2921174812	J	Ferrite Bead	AB
FB410	9NK2921174812	J	Ferrite Bead	AB
FB411	9NK2921174812	J	Ferrite Bead	AB
FB414	9NK2921174812	J	Ferrite Bead	AB
FB3001	9NK2921174812	J	Ferrite Bead	AB
FB3002	9NK2921174812	J	Ferrite Bead	AB
FB3003	9NK2921174812	J	Ferrite Bead	AB
FB3004	9NK2921174812	J	Ferrite Bead	AB
FB3005	9NK2921174812	J	Ferrite Bead	AB
FB3006	9NK2921174812	J	Ferrite Bead	AB
FB3007	9NK2921174812	J	Ferrite Bead	AB
FB3008	9NK2921174812	J	Ferrite Bead	AB
FB3009	9NK2921174812	J	Ferrite Bead	AB
FB3010	9NK2921174812	J	Ferrite Bead	AB
FB5501	9NK2921174812	J	Ferrite Bead	AB
FB5502	9NK2921174812	J	Ferrite Bead	AB
CN3001	9NK3074170028	J	Socket, 30pin	AL
J401	9NK307226352S	J	Mini Din 4P	AK
J402	9NK3072268956	J	RCA Jack	AN
J403	9NK307226392T	J	Phone Jack	AE
J404	9NK307226392T	J	Phone Jack	AE
J405	9NK307226392T	J	Phone Jack	AE
J3001	9NK307226382T	J	BNC 11P	AT
J5501	9NK307226402T	J	Phone Jack	AE
J9401	9NK3072263698	J	RJ45 8P8C	AM
SC3001	9NK3074041031	J	D-Sub Flmale 15P	AW
SC3002	9NK3074041131	J	D-Sub Flmale 15P	AV
SC3003	9NK3074071031	J	D-Sub Male 9P	AT

9NK5600204256
INDEX UNIT

INTEGRATED CIRCUITS

IC1101	9NK2520004104	J	Comparater LM393D,623	AC
IC1102	9NK2312000012	J	Photointerrupter GP2S27T2J00F	AK

CAPACITORS

C1101	9NK1517658000	J	0.1	50V	Ceramic	AB
C1102	9NK1517658000	J	0.1	50V	Ceramic	AB
C1103	9NK1511445000	J	1000p	50V	Ceramic	AB

RESISTORS

R1100	9NK0341071300	J	33k	1/10W	Metal Oxide	AB
R1101	9NK0343680100	J	68	1/8W	Metal Oxide	AB
R1102	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R1103	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R1104	9NK0341059300	J	10k	1/10W	Metal Oxide	AB
R1105	9NK0343000300	J	0	1/10W	Metal Oxide	AB

MISCELLANEOUS PART

P1101	9NK3070070528	J	Connector, 4pin	AE

9NK5600204257
IR (Front) UNIT

DIODE

D2205	9NK0920990416	J	EV18N	AC

COIL

L5701	9NK2923050812	J	Inductor, 22µH	AB

CAPACITORS

C5701	9NKF122201208	J	22	16V	Electrolytic	AB
C5704	9NK1517658000	J	0.1	50V	Ceramic	AB

MISCELLANEOUS PARTS

CN5701	9NK3071323934	J	Connector, 3pin	AB
RMC5701	9NK2320600528	J	Infrared Remote Control Receiver	AK

9NK5600204260
IR (Back) UNIT

DIODE

D2206	9NK0920990416	J	EV18N	AC

COIL

L5702	9NK2923050812	J	Inductor, 22µH	AB

CAPACITORS

C5702	9NKF122201208	J	22	16V	Electrolytic	AB
C5705	9NK1517658000	J	0.1	50V	Ceramic	AB

MISCELLANEOUS PARTS

CN5702	9NK3071323934	J	Connector, 3pin	AB
RMC5702	9NK2320600528	J	Infrared Remote Control Receiver	AK

Ref. No.	Part No.	★	Description	Code

9NK5600204258
KEYPAD UNIT

TRANSISTORS

Q2201	9NKM532500236	J	DTC144EUA	AB
Q2202	9NKM532500236	J	DTC144EUA	AB
Q2203	9NKM532500236	J	DTC144EUA	AB
Q2204	9NKM532500236	J	DTC144EUA	AB
Q2205	9NKM532500236	J	DTC144EUA	AB
Q2206	9NKM532500236	J	DTC144EUA	AB
Q2207	9NKM532500236	J	DTC144EUA	AB

DIODES

D2201	9NK2300663706	J	LED, Red/Yellow-Green	AD
D2202	9NK2300663706	J	LED, Red/Yellow-Green	AD
D2203	9NK2300663706	J	LED, Red/Yellow-Green	AD
D2204	9NK2300471206	J	LED, Red	AC

RESISTORS

R2201	9NK0343151300	J	150	1/10W	Metal Oxide	AB
R2202	9NK0343391300	J	390	1/10W	Metal Oxide	AB
R2203	9NK0343151300	J	150	1/10W	Metal Oxide	AB
R2204	9NK0343391300	J	390	1/10W	Metal Oxide	AB
R2205	9NK0343151300	J	150	1/10W	Metal Oxide	AB
R2206	9NK0343391300	J	390	1/10W	Metal Oxide	AB
R2207	9NK0343391300	J	390	1/10W	Metal Oxide	AB
R2208	9NK0343000300	J	0	1/10W	Metal Oxide	AB

SWITCH

S2201	9NK3000901620	J	Switch, VOLUM - (LEFT)	AE
S2202	9NK3000901620	J	Switch, FOCUS (-)	AE
S2203	9NK3000901620	J	Switch, UP	AE
S2204	9NK3000901620	J	Switch, ZOOM (-)	AE
S2205	9NK3000901620	J	Switch, AUTOSYNC	AE
S2206	9NK3000901620	J	Switch, DOWN	AE
S2207	9NK3000901620	J	Switch, FOCUS (+)	AE
S2208	9NK3000901620	J	Switch, ZOOM (+)	AE
S2209	9NK3000901620	J	Switch, ENTER	AE
S2210	9NK3000901620	J	Switch, INPUT4, 5	AE
S2211	9NK3000901620	J	Switch, STANDBY	AE
S2212	9NK3000901620	J	Switch, KEYSTONE	AE
S2213	9NK3000901620	J	Switch, RETURN (UNDO)	AE
S2214	9NK3000901620	J	Switch, ON	AE
S2215	9NK3000901620	J	Switch, VOLUM + (RIGHT)	AE
S2216	9NK3000901620	J	Switch, MENU	AE
S2217	9NK3000901620	J	Switch, INPUT1, 2, 3	AE
S2218	9NK3000901620	J	Switch, LENS SHIFT	AE

MISCELLANEOUS PARTS

SC2201	9NK3072608866	J	Connector, 12pin	AG
SC2202	9NK3070070700	J	Connector, 10pin	AG

Ref. No.	Part No.	★	Description	Code

9NK5600204263
LAMP1 COVER UNIT

MISCELLANEOUS PARTS

S1	9NK3000069336	J	Maicro Switch	AF
CN1	9NK3070297028	J	Connector, 2pin	AE

9NK5600204264
LAMP2 COVER UNIT

MISCELLANEOUS PARTS

S2	9NK3000069336	J	Maicro Switch	AF
CN2	9NK3070297028	J	Connector, 2pin	AE

CABINET AND MECHANICAL PARTS

Ref. No.	Part No.	★	Description	Code
1	9NK0990073900	J	Ballast Unit	CG
2	9NK3100001000	J	Screw, M3*0.5*10 AC-IN Socket*2	AC
3	9NK3100132500	J	Screw, M3*0.5*25 Lamp Blower L*2	AD
4	9NK3100132500	J	Screw, M3*0.5*25 Lamp Blower R*2	AD
5	9NK3100132800	J	Screw, M3*0.5*28 Blower Rod*3	AB
6	9NK3100300800	J	Screw, M3*0.5*8 Blower Bracket Rod*2	AB
7	9NK3100300800	J	Screw, M3*0.5*8 Sensor BD*1	AB
8	9NK3100300800	J	Screw, M3*0.5*8 Blower Bracket Lamp R*2	AB
9	9NK3100300800	J	Screw, M3*0.5*8 Handle Bracket2*6	AB
10	9NK3100300800	J	Screw, M3*0.5*8 Blower Duct*3	AB
11	9NK3100300800	J	Screw, M3*0.5*8 IO PWBA*6	AB
12	9NK3100300800	J	Screw, M3*0.5*8 IO Bracket*4	AB
13	9NK3100300800	J	Screw, M3*0.5*8 FAN Bracket PWBA*2	AB
14	9NK3100300800	J	Screw, M3*0.5*8 Ballast Holder*4	AB
15	9NK3100300800	J	Screw, M3*0.5*8 Power PWBA*4	AB
16	9NK3100300800	J	Screw, M3*0.5*8 Power Channel Down*4	AB
17	9NK3100300800	J	Screw, M3*0.5*8 SPK Bracket*2	AB
18	9NK3100300800	J	Screw, M3*0.5*8 Audio*4	AB
19	9NK3100450600	J	Screw, M3*0.5*6 Power Channel*4	AB
20	9NK3100300800	J	Screw, M3*0.5*8 ENG*4	AB
21	9NK3100300800	J	Screw, M3*0.5*8 PC PWBA*1	AB
22	9NK3100300800	J	Screw, M3*0.5*8 Filter PWBA*4	AB
23	9NK3100300800	J	Screw, M3*0.5*8 TOP*7	AB
24	9NK3100300800	J	Screw, M3*0.5*8 ADJ*2	AB
25	9NK3100300800	J	Screw, M3*0.5*8 Bimetal*4	AB
26	9NK3100300800	J	Screw, M3*0.5*8 Handle Bracket3*11	AB
27	9NK3100300800	J	Screw, M3*0.5*8 MB*5	AB
28	9NK3100300800	J	Screw, M3*0.5*8 Lamp Channel	AB
29	9NK3100300800	J	Screw, M3*0.5*8 PC BD Bracket*2	AB
30	9NK3100300800	J	Screw, M3*0.5*8 Engine Support*5	AB
31	9NK3100402000	J	Screw, M3*0.5*20 FAN PWBA*8	AB
32	9NK3102301200	J	Screw, M4*0.7*12 Lens Shift*8	AB
33	9NK3102321500	J	Screw, M4*0.7*15 Lens*3	AB
34	9NK3105120600	J	Screw, M4*0.7*8 AC-Socket Cable*1	AB
35	9NK3105136100	J	Screw, M2*0.4*1.7 Speaker	AB
36	9NK3105221300	J	Screw, M3*0.5*5 ADJ*6	AB
37	9NK3105260800	J	Screw, M2*0.4*5 Lamp Duct R*2	AB
38	9NK3105260800	J	Screw, M2*0.4*5 Lamp_Duct_L*2	AB
39	9NK3105260800	J	Screw, M2*0.4*5 Rod Duct*1	AB
40	9NK3105260800	J	Screw, M2*0.4*5 Power Duct*4	AB
41	9NK3105260800	J	Screw, M2*0.4*5 Lamp L Grill*4	AB
42	9NK3105260800	J	Screw, M2*0.4*5 Micro_SW*2	AB
43	9NK3105263700	J	Screw, M2*0.4*5 Keypad*11	AB
44	9NK3105302700	J	Screw, M3*0.5*14 Lamp Channel	AB
45	9NK3105302700	J	Screw, M3*0.5*14 TOP*2	AB
46	9NK3105302700	J	Screw, M3*0.5*14 Lamp-Channel-Cover2*1	AB
47	9NK3106150400	J	Screw, M3.5*1*8 Handle Bracket1*4	AB
48	9NK3106150400	J	Screw, M3.5*1*8 IR Sensor*1	AB
49	9NK3106150400	J	Screw, M3.5*1*8 Thermal Sensor*1	AB
50	9NK3106150400	J	Screw, M3.5*1*8 Chassis	AB
51	9NK3106170600	J	Screw, É"3*1.058*12 TOP*9	AB
52	9NK3106390400	J	Screw, M3*1.058*8 Lamp Channel	AB
53	9NK3106390400	J	Screw, M3*1.058*8 Filter Interlock*1	AB
54	9NK3109107500	J	Screw, M2*0.4*3 Lens Trim*1	AB
55	9NK3110260500	J	Washer E-Ring Lamp Cover*1	AB
56	9NK3110260500	J	Washer E-Ring Handle Pin*2	AB
57	9NK3110366300	J	Washer PLAIN ADJ*2	AB
58	9NK3200937600	J	Label Image Quality	AG
59	9NK3201988101	J	Label ID	AM
60	9NK3202334300	J	Label Warning	AK
61	9NK3202334400	J	Label Warning	AG
62	9NK3209227800	J	Label Fusaguna	AK
63	9NK3202056501	J	Lamp Label	
64	9NK3230038700	J	Snap Bushing	AC
65	9NK3240270800	J	Blower Cushion	AC
66	9NK3240707501	J	Insulator	AG
67	9NK3240738700	J	Insulator	AH
68	9NK3240984100	J	Cushion Rubber for Fan	AP
69	9NK3240988801	J	Cushion SIRub for Fan	AN
70	9NK3240990600	J	Sponge Cushion	AK
71	9NK3240997400	J	Sponge	AE
72	9NK3240997600	J	Sponge	AH
73	9NK3241171402	J	Insulator	AT
74	9NK3241175100	J	Insulator	AP
75	9NK3241175300	J	Insulator	AQ
76	9NK3241175500	J	Insulator IR Filter	AK
77	9NK3241190701	J	Insulator	AQ
78	9NK3351276800	J	Pin	AD
79	9NK3797405000	J	Cover IO Ass'y	
80	9NK3390041701	J	Lamp AIR Guide	AT
81	9NK3390042300	J	IR Front Hmt	AF
82	9NK3390128800	J	Cover IR Back	AF
83	9NK3797405100	J	Top Cabinet Ass'y	
83-1	*Not Available*	-	Wire Holder	–
83-2	*Not Available*	-	Soponge	–
83-3	*Not Available*	-	Soponge	–
83-4	*Not Available*	-	Tefron	–
83-5	*Not Available*	-	Tefron	–
83-6	*Not Available*	-	Top Cabinet	–
84	9NK3797405200	J	Cover Blower R Ass'y	
85	9NK3797405300	J	Cover Blower L Ass'y	
86	9NK3390802000	J	Handle	BA
87	9NK3390902600	J	Lens Cover	AX
88	9NK3391202501	J	Cover Filter	AX
89	9NK3391305300	J	Lamp Cover	AY
90	9NK3395016200	J	Fan Holder	AL
91	9NK3395016303	J	Lens Trim	AQ
92	9NK3395016400	J	Lamp Duct L	AH
93	9NK3395016500	J	Power Duct	AQ
94	9NK3797405400	J	Lamp Channel Ass'y	
95	9NK3395016700	J	Lamp Duct R-R	AF
96	9NK3395016800	J	Lamp Duct R-L	AH
97	9NK3395017002	J	Lamp Channel Btm	AX

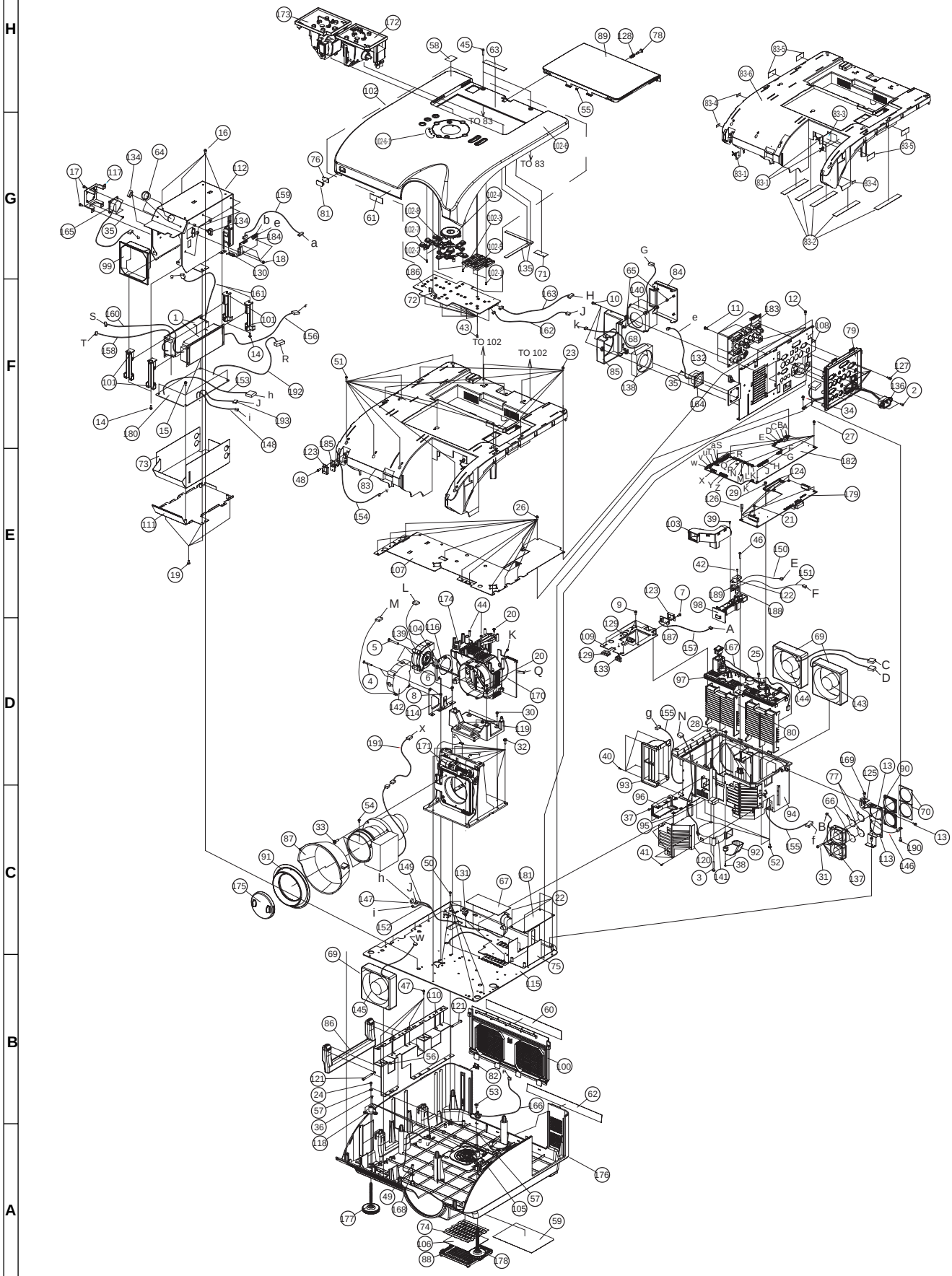
CABINET AND MECHANICAL PARTS (Continued)

Ref. No.	Part No.	★	Description	Code
98	9NK3395017103	J	Lamp Channel Top	AN
99	9NK3395017200	J	Power AIR Guide	AG
100	9NK3797405500	J	Fan AIR Guide Ass'y	
101	9NK3797405600	J	Holder Ass'y	
102	9NK3398012901	J	Top Case Ass'y	CA
102-1	9NK3105260800	J	Screw, M2*0.4*5 Button2*2	AB
102-2	9NK3105260800	J	Screw, M2*0.4*5 Button Frame2*2	AB
102-3	9NK3105260800	J	Screw, M2*0.4*5 Button Frame1*2	AB
102-4	9NK3391009800	J	Button	
102-5	9NK3391010400	J	Botton	
102-6	9NK3398013601	J	Top Cover Ass'y	BZ
102-7	9NK3398013700	J	Frame Button	
102-8	9NK3398013800	J	Frame Button	
103	9NK3398013001	J	Rod Duct Ass'y	BE
104	9NK3421035800	J	Cable Tie	AB
105	9NK3455089300	J	ADJ Foot Bracket	AK
106	9NK3455089500	J	Screen Bottom	AF
107	9NK3797405700	J	Handle Bracket3 Ass'y	
108	9NK3797405800	J	IO Bracket Ass'y	
109	9NK3455090201	J	Plate	AK
110	9NK3797405900	J	Handle Bracket Ass'y	
111	9NK3455090801	J	Power Channel Down	AR
112	9NK3797406000	J	Power Channel Ass'y	
113	9NK3455091000	J	Fan Bracket	AK
114	9NK3455091100	J	Blower Bracket Lamp R	AG
115	9NK3455091202	J	Case Chassis	BB
116	9NK3455091300	J	Blower Bracket	AK
117	9NK3455091502	J	Bracket Spk R	AH
118	9NK3455091700	J	Adj Foot Bracket R	AK
119	9NK3455092900	J	Engine Support Mga	AX
120	9NK3455093600	J	Lamp L Grill	
121	9NK3455097001	J	Holder	AN
122	9NK3455200600	J	Bracket Cover	AE
123	9NK3455203702	J	Bracket IR Front	AF
124	9NK3455216100	J	Bracket PC Board	AQ
125	9NK3455217400	J	Fan Bracket	
126	9NK3461429000	J	Stand Off	AD
127	9NK3461431702	J	Stand Off	AN
128	9NK3462009700	J	Spring	AE
129	9NK3470304700	J	Wire Saddle (Handle_Bracket2*2)	AC
130	9NK3470314400	J	Wire Clip (Power Channel UP)	AD
131	9NK3470314600	J	Wire Saddle (Chassis*6)	AD
132	9NK3470314600	J	Wire Saddle (IO_Bracket*1)	AD
133	9NK3470314600	J	Wire Saddle (Handle_Bracket2*1)	AD
134	9NK3470314600	J	Wire Saddle (Power_Channel_UP*8)	AD
135	9NK3470314900	J	Cable Mount	AF
136	9NK3610554102	J	AC Socket Ass'y	AL
137	9NK3620417511	J	DC Fan Ass'y	BD
138	9NK3620623011	J	DC Fan Ass'y	AY
139	9NK3620690511	J	DC Fan Ass'y	BB
140	9NK3620690611	J	DC Fan Ass'y	BB
141	9NK3620790811	J	DC Fan Ass'y	BD
142	9NK3620790911	J	DC Fan Ass'y	BD
143	9NK3620913811	J	DC Fan Ass'y	BB
144	9NK3620913911	J	DC Fan Ass'y	BB
145	9NK3620914011	J	DC Fan Ass'y	AY
146	9NK3640990100	J	Wire With Terminal	AE
147	9NK3670253302	J	Wire With Housing 2Pin	AG
148	9NK3670253401	J	Wire With Housing 2Pin	AG
149	9NK3670253502	J	Wire With Housing 2Pin	AK
150	9NK3670255501	J	Wire With Housing 2Pin	AG
151	9NK3670255601	J	Wire With Housing 2Pin	AG
152	9NK3670336002	J	Wire With Housing 3Pin	AL
153	9NK3670336203	J	Wire With Housing 4Pin	AN
154	9NK3670336301	J	Wire With Housing 3Pin	AK
155	9NK3670336500	J	Wire With Housing 3Pin	AZ
156	9NK3670336601	J	Wire With Housing 4Pin	AT
157	9NK3670336701	J	Wire With Housing 3Pin	AG
158	9NK3670627001	J	Wire With Housing 6Pin	AL
159	9NK3670707701	J	Wire With Housing 7Pin	AL
160	9NK3674024401	J	Wire With Housing 4Pin	AL
161	9NK3674032400	J	Wire With Housing 4Pin	AT
162	9NK3679031301	J	Wire With Housing 10Pin	AM
163	9NK3679031401	J	Wire With Housing 12Pinin	AN
164	9NK3790196401	J	Speaker Ass'y L	AB
165	9NK3790196501	J	Speaker Ass'y R	AB
166	9NK3790196601	J	Other Ass'y Sensor Switch+Housing	AL
167	9NK3790196705	J	Other Ass'y Rocker Switch+Housing	
168	9NK3790196804	J	Wire With Thermistor 2Pin	AS
169	9NK3100300800	J	Screw, M3*0.5*8	AB
170	9NK3790197804	J	Wire With Thermistor 2Pin	AR
171	9NK3797094303	J	Lens Shift Ass'y	
172	AN-PH50LP1	-	Lamp Unit 1, (Option)	–
173	AN-PH50LP2	-	Lamp Unit 2, (Option)	–
174	9NK3797094602	J	Optical Mecha	
175	9NK3797200401	J	Lens Cap Ass'y	AN
176	9NK3797204901	J	Bottom Case Ass'y	CB
177	9NK3797205002	J	Foot Tie R Ass'y	
178	9NK3797205102	J	Foot Tie L Ass'y	
179	9NK5600204261	J	PC I/F PWB Ass'y	
180	9NK5600204232	J	Power PWB Ass'y	BX
181	9NK5600204233	J	Filter PWB Ass'y	BE
182	9NK5600204252	J	Main PWB Ass'y	CK
183	9NK5600204254	J	Terminal PWB Ass'y	BW
184	9NK5600204255	J	Audio PWB Ass'y	BR
185	9NK5600204257	J	IR Front PWB Ass'y	AW
186	9NK5600204258	J	Keypad PWB Ass'y	AZ
187	9NK5600204260	J	IR Rear PWB Ass'y	AW
188	9NK5600204263	J	Lamp1 Cover PWB Ass'y	AW
189	9NK5600204264	J	Lamp2 Cover PWB Ass'y	AW
190	9NK3100300800	J	Screw, M3*0.5*8	AB
191	9NK3670628001	J	Wire With Housing 6Pin	AR
192	9NK3679032803	J	Wire With Housing 34Pin	
193	9NK3670336102	J	Wire With Housing 3Pin	AK

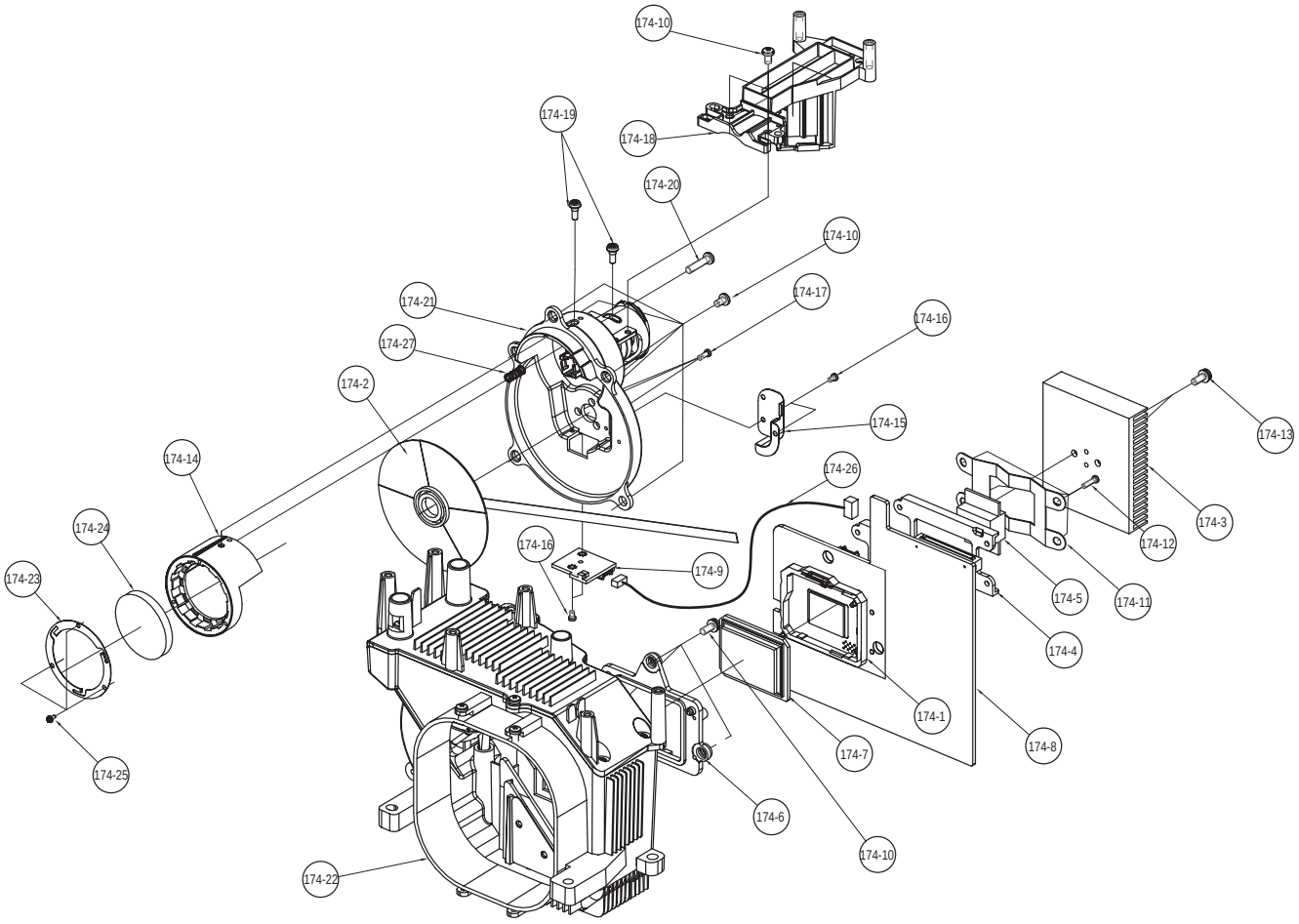
OPTICS MECHANISM PARTS

Ref. No.	Part No.	★	Description	Code
174	9NK3797094602	J	Optical Mecha	
174-1	9NK3020060329	J	DMD Socket 166Pin	AZ
174-2	9NK3250701300	J	Color Wheel	BU
174-3	9NK3341531000	J	Heat Sink	AQ
174-4	9NK3450201700	J	Conductor Stand	AU
174-5	9NK3797406100	J	DMD Stud Ass'y	
174-6	9NK3455091601	J	DMD Plate	AN
174-7	9NK3455092001	J	DMD Mount	AX
174-8	9NK5059700981	J	DMD 0.7 XGA DDR	DU
174-9	9NK5600204253	J	Formatter Board Ass'y	CM
174-10	9NK3105225000	J	Screw, M3*0.5*5	AB
174-11	9NK3461803500	J	Spring, DMD Mount	AH
174-12	9NK3105041000	J	Screw, M2*0.4*8	AB
174-13	9NK3100330800	J	Screw, M3*0.5*8	AB
174-14	9NK3455092100	J	Lens A Fix	AX
174-15	9NK3455097600	J	Rod Engine Mask	AG
174-16	9NK3105261700	J	Screw, M2*0.4*2	AC
174-17	9NK3105136100	J	Screw, M2*0.4*1.7	AB
174-18	9NK3797406300	J	Mirr A Fix Ass'y	
174-19	9NK3105361300	J	Screw, M2.5*0.45*1.8	AB
174-20	9NK3105311500	J	Screw, M3*0.5*16	AB
174-21	9NK3797406200	J	Engine Rod Holder Ass'y	
174-22	9NK3797406400	J	Engine Body Ass'y	
174-23	9NK3455093800	J	Lens A Bracket	AG
174-24	9NK3250117500	J	Relay Lens	BB
174-25	9NK3105130200	J	Screw, M2*0.4*5	AB
174-26	9NK3674030100	J	Wire With Housing	AH
174-27	9NK3462003201	J	Spring	AC
174-28	9NK3241500900	J	Pad for DMD	
174-29	9NK3241501000	J	Pad for DMD Mount	
174-30	9NK5600204256	J	INDEX Unit	AT

CABINET AND MECHANICAL PARTS



OPTICS MECHANISM PARTS



Ref. No.	Part No.	★	Description	Code

SUPPLIED ACCESSORIES

⚠ X1	9NK3090152800	J	AC cord for US with ferrite core	AR
⚠ X1	9NK3090152700	J	AC cord for Europe & Korea with ferrite core	AT
⚠ X1	9NK3090152900	J	AC cord for UK with ferrite core	AT
⚠ X1	9NK3090152600	J	AC cord for Australia with ferrite core	AT
X2	9NK5041808700	J	Remote control unit	BQ
X3	9NK3790197000	J	Mouse receiver	BM
X4	9NK3080431000	J	RGB cable	AX
X5	9NK3532094500	J	CD for manual	AH
X6	9NK5010011800	J	Operation manual	AZ
	9NK5012043600	J	Guarantee card (for USA)	AK
	9NK5012044900	J	ER information (for USA)	AK
	9NK5012045100	J	Guarantee card (for Canada)	AK
	9NK5012045000	J	ER information (for Canada)	AK
	9NK3202236400	J	ER sticker	AC
	9NK3240992900	J	Lens Attachment Part Cover(NL)	

PACKING PARTS
(NOT REPLACEMENT ITEM)

S1	9NK3512277700	J	Packing Case(L)	AX
S1	9NK3512280100	J	Packing Case(NL)	AX
S2	9NK3510757801	J	Accessories Case	AK
S3	9NK3500142400	J	Buffer Material (Top)	BB
S4	9NK3500142501	J	Buffer Material (Bottom)	BA
S5	9NK3500957300	J	Polystylene Bag	AH

SERVICE JIGS
(Use For Servicing)

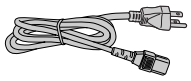
	9NK5600204283	J	Extension Cable 80pin, Main-Formatter	CH
	9NK5600204284	J	Extension Cable 60pin, Main-Formatter	CD
	9NK5600204285	J	Extension Cable 30pin, Terminal-PC	BT
	9NK5600204286	J	Extension Cable 70pin, Formatter-PC	BW
	9NK5600204287	J	Extension Cable 4pin, Color Wheel-Index	BC
	9NK5600204288	J	Extension Cable 4pin, Fan	BB
	9NK5600204289	J	Extension Cable 3pin, Fan	BB
	9NK5600204290	J	Extension Cable 2pin, Thermistor	BV

Supplied accessories

X2
Remote control

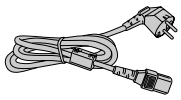
X1
Power cord*

(1)



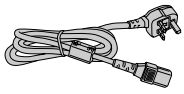
For U.S., Canada, etc.
(12' (3.6 m))

(2)



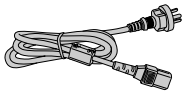
For Europe, except U.K.
(6' (1.8 m))

(3)



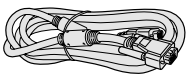
For U.K., Hong Kong and Singapore
(6' (1.8 m))

(4)

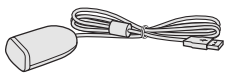


For Australia, New Zealand and Oceania
(6' (1.8 m))

*Use the power cord that corresponds to the wall outlet in your country.



X4
RGB cable
(9'10" (3.0 m))

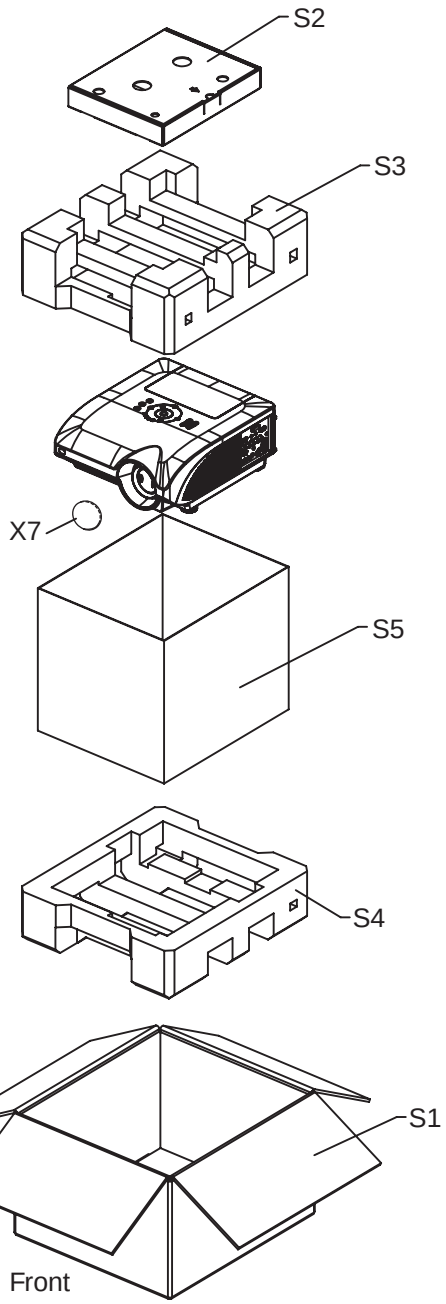


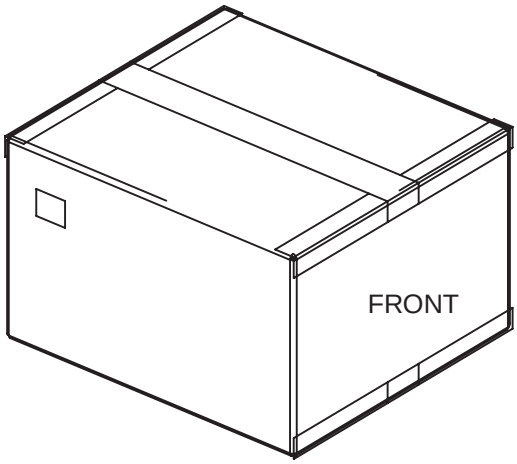
X3
Remote mouse receiver
(5'3" (1.6 m))

X5
Projector manual and technical reference CD-ROM

X6
Operation manual

PACKING OF THE SET / VERPACKEN DES GERÄTS





- M E M O -

SCHEMATIC DIAGRAM
SCHEMATISCHER SCHALTPLAN

MODELS XG-PH50X
MODELLE XG-PH50X-NL

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TERMINAL UNIT ..... D23 ~ D26
FORMATTER UNIT ..... D27 ~ D38
PC I/F UNIT ..... D39 ~ D58
LVPS CONTROL UNIT ..... D59 ~ D60
PFC CONTROL UNIT ..... D61 ~ D62
FILTER UNIT ..... D63 ~ D64
POWER UNIT ..... D65 ~ D68
LAMP DETECTION SWITCH UNIT D69
INDEX UNIT D69
IR FRONT/REAR UNIT D70
KEY PAD UNIT D70
AUDIO UNIT D71

DESCRIPTION OF SCHEMATIC DIAGRAM

WAVEFORM MEASUREMENT CONDITION:

1. Waveforms at test points are observed at the supply voltage of AC 220V. Signals are fed by a color bar signal generator for servicing purpose.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance "Ω" is omitted. (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted. (J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/10W, unless otherwise noted.

CAPACITOR

1. All capacitors are μF, unless otherwise noted. (P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.

(ML): Mylar (TA): Tantalum
(PF): Polypro Film (ST): Styrol

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:

1.DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2.SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "⚠" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

BESCHREIBUNG DES SCHEMATISCHEN SCHALTPLANS

SIGNALFORMMESSUNGEN:

1. Die Wellenformen an den Testpunkten werden bei einer Netzspannung von 220V verfolgt. Signale werden für die Wartung mit einem Farbbalken-Signal generator zugeführt.

BEZEICHNUNG DES WIDERSTANDS UND KONDENSATORS:

WIDERSTAND

1. Die Widerstandseinheit "Ω" wird weggelassen. (K=kΩ=1000 Ω, M=MΩ)
2. Alle Widerstände haben ± 5%, sofern nicht anders angegeben.(J= ± 5%, F= ± 1%, D= ± 0.5%)
3. Alle Widerstände haben 1/10W, sofern nicht anders angegeben.

KONDENSATOR

1. Die Kapazitätseinheit ist μF, sofern nicht anders angegeben. (P=pF=μμF).
2. Alle Kondensatoren haben 50V, sofern nicht anders angegeben.
3. Alle Kondensatoren sind Keramiktyp, sofern nicht anders angegeben.

(ML): Mylar (TA): Tantal
(PF): Polyprofilm (ST): Styrol

ACHTUNG:
Bei diesem Schaltplan handelt es sich um den ursprünglichen. Esönnen daher geringfügige Unterschiede zu dem Ihrem bestehen.

SICHERHEITSANMERKUNGEN:

1. **VOR DEM AUSWECHSELN VON TEILEN MUSS UNBEDINGT NETZSTECKER AUS DER NETZSTECKDOSE GEZOGEN WERDEN.**
2. **DIE WARMEABLEITER DER HALBLEITER SOLLTEN BEIM BETRIEB DES CHASSIS ALS MÖGLICHE URSACHEN VON GEFÄHRLICHEN ELEKTRISCHEN SCHLÄGEN BETRACHTET WERDEN.**

WICHTIGE SICHERHEITSANMERKUNGEN:

MIT "⚠"( )BEZEICHNETEN TEILE SIND BESONDERS WICHTIG FÜR DIE AUFRECHTERHALTUNG DER SICHERHEIT . BEIM WECHDIESER TEILE SOLLTEN DIE VORGESCHRIEBENEN TEILE IMMER VERWENDET WERDEN, UM SOWOHL DIE SICHERHEIT ALS AUCH DIE LEISTUNG DES GERÄTES AUFRECHTZUERHALTEN.

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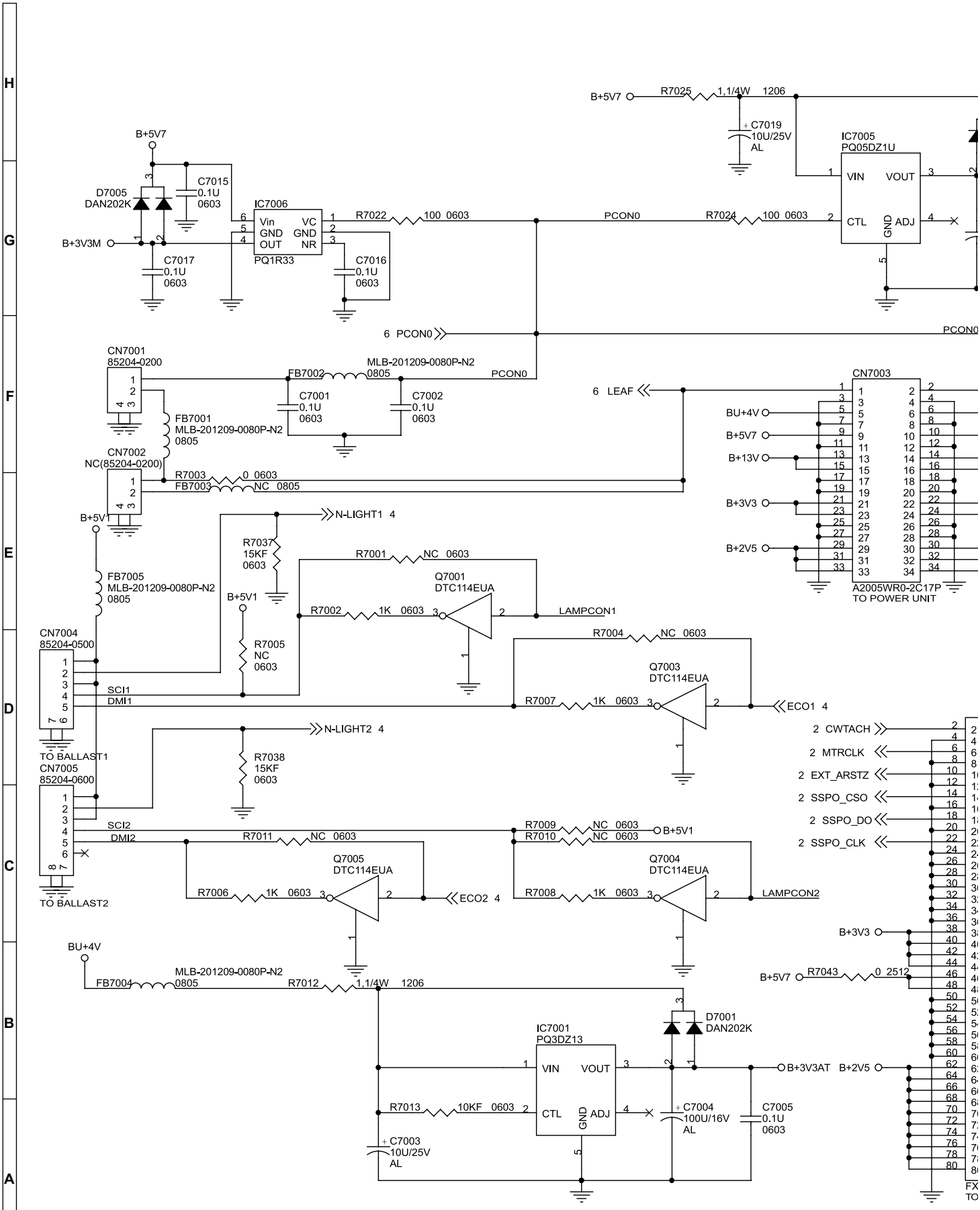

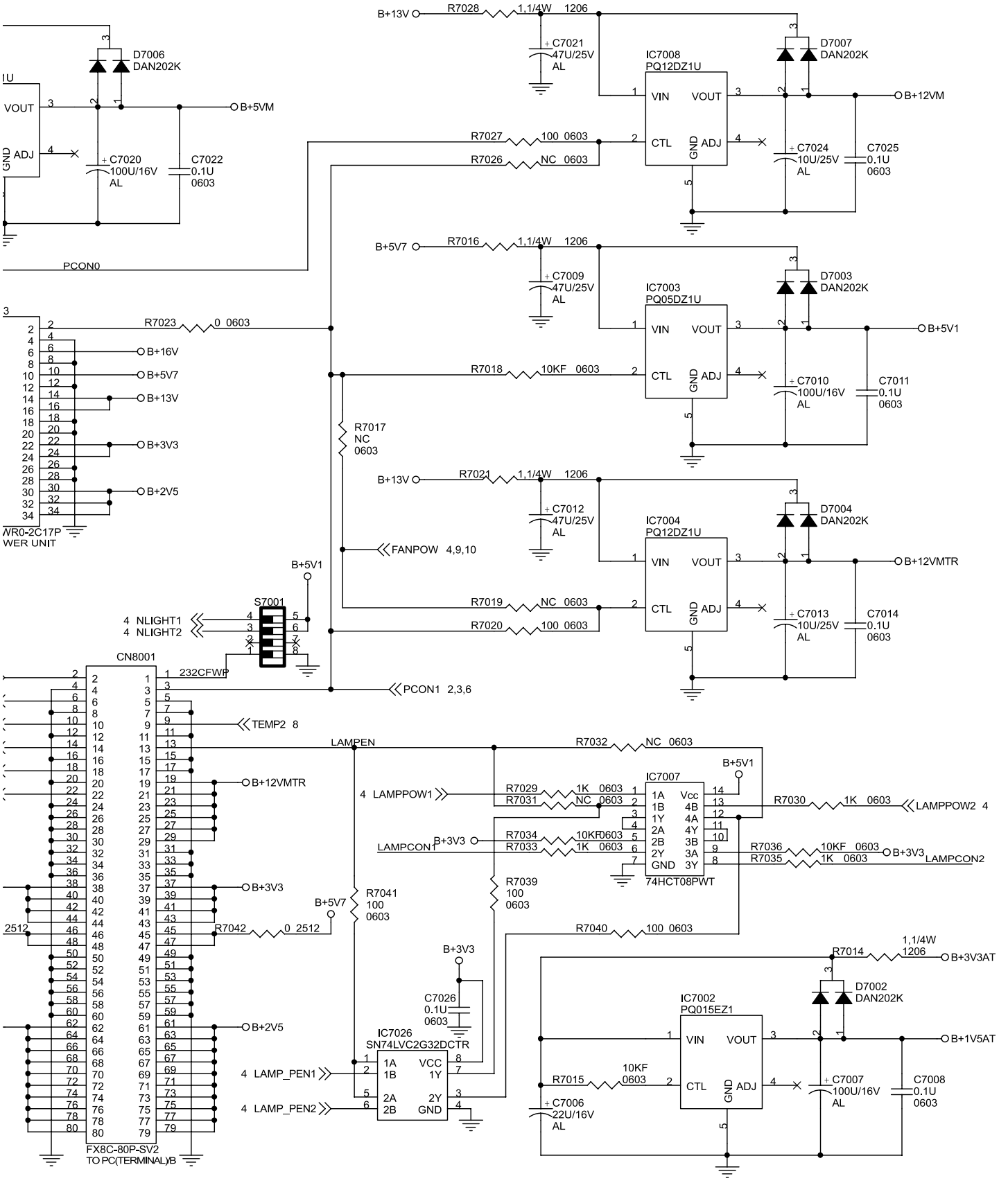

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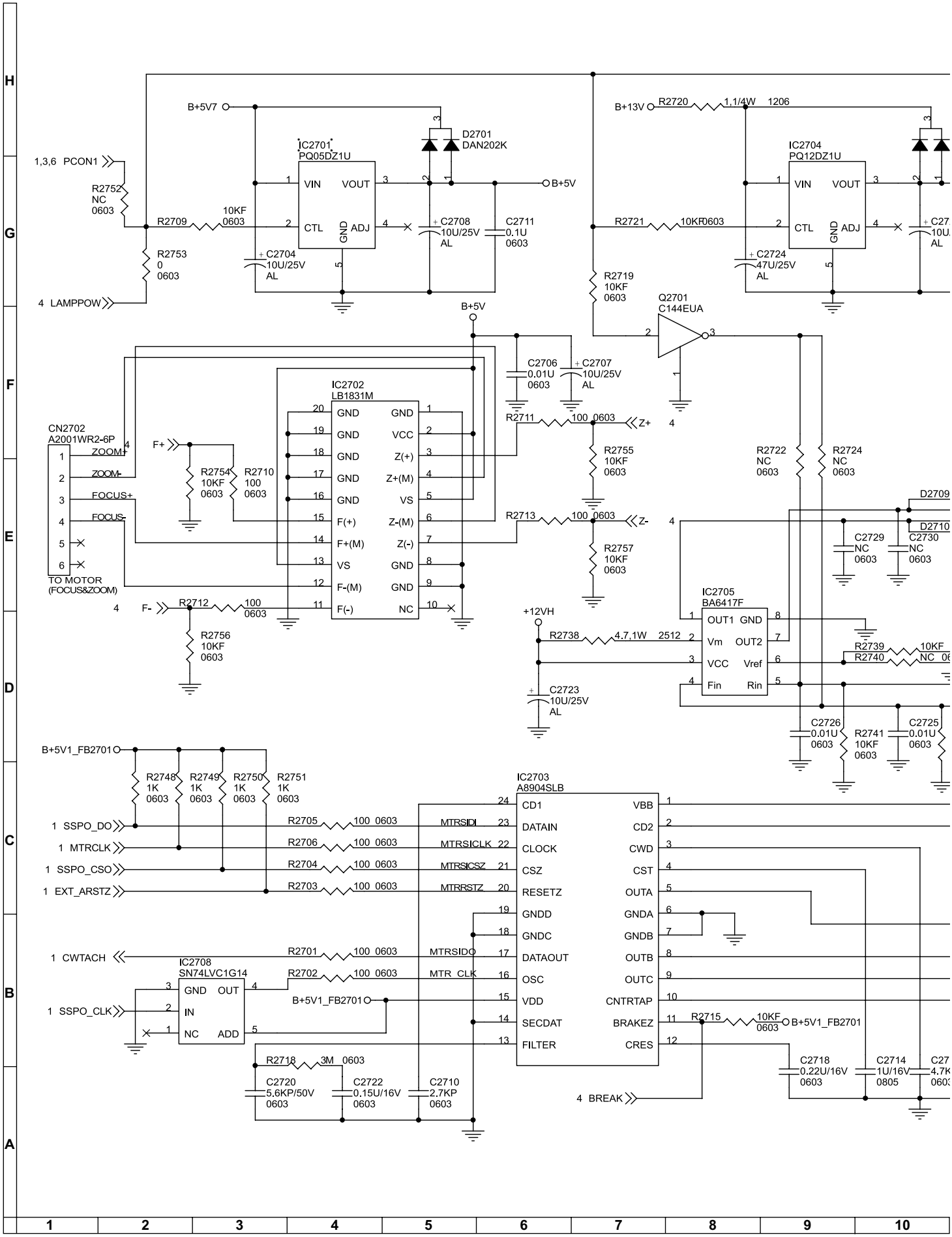

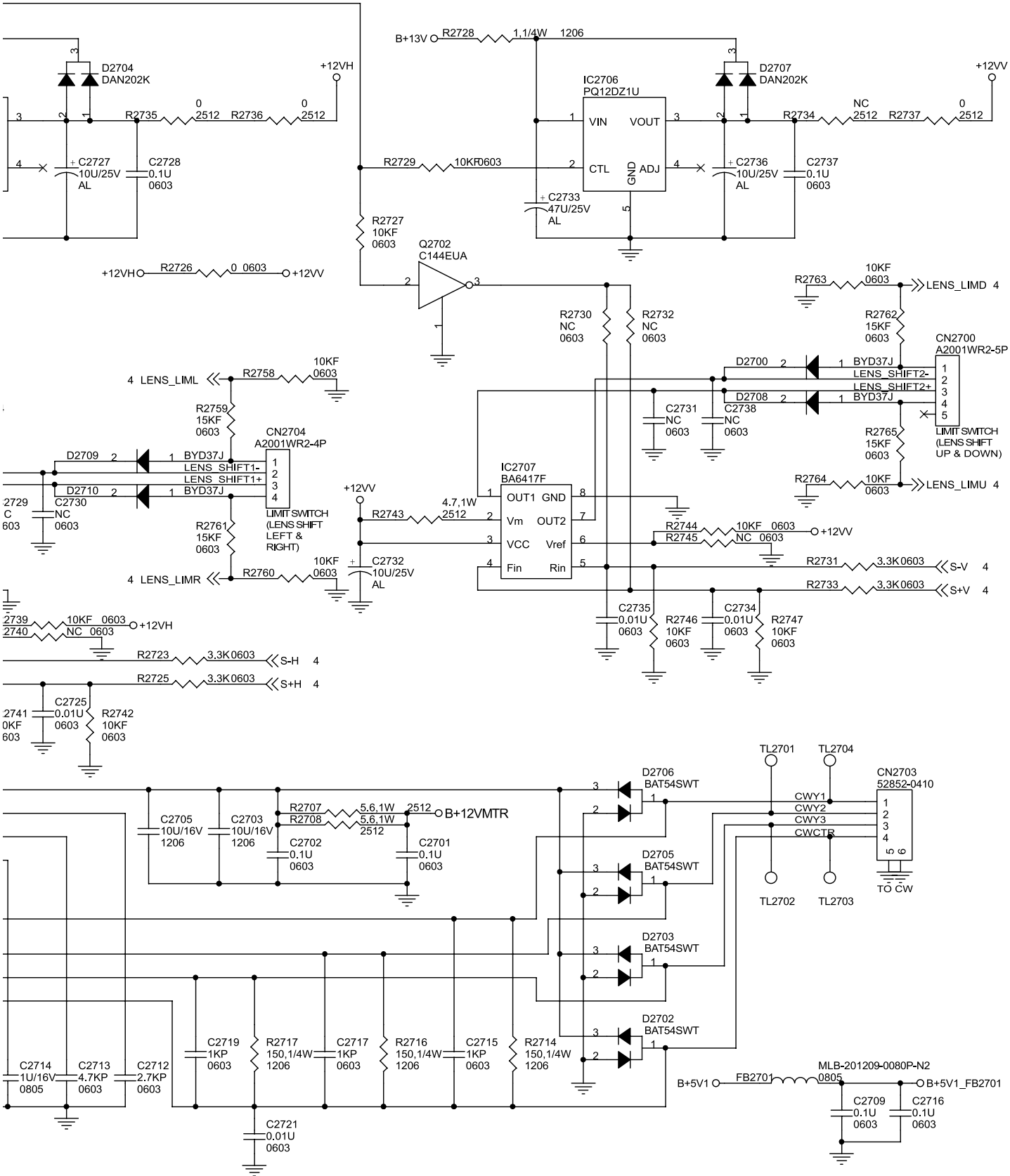

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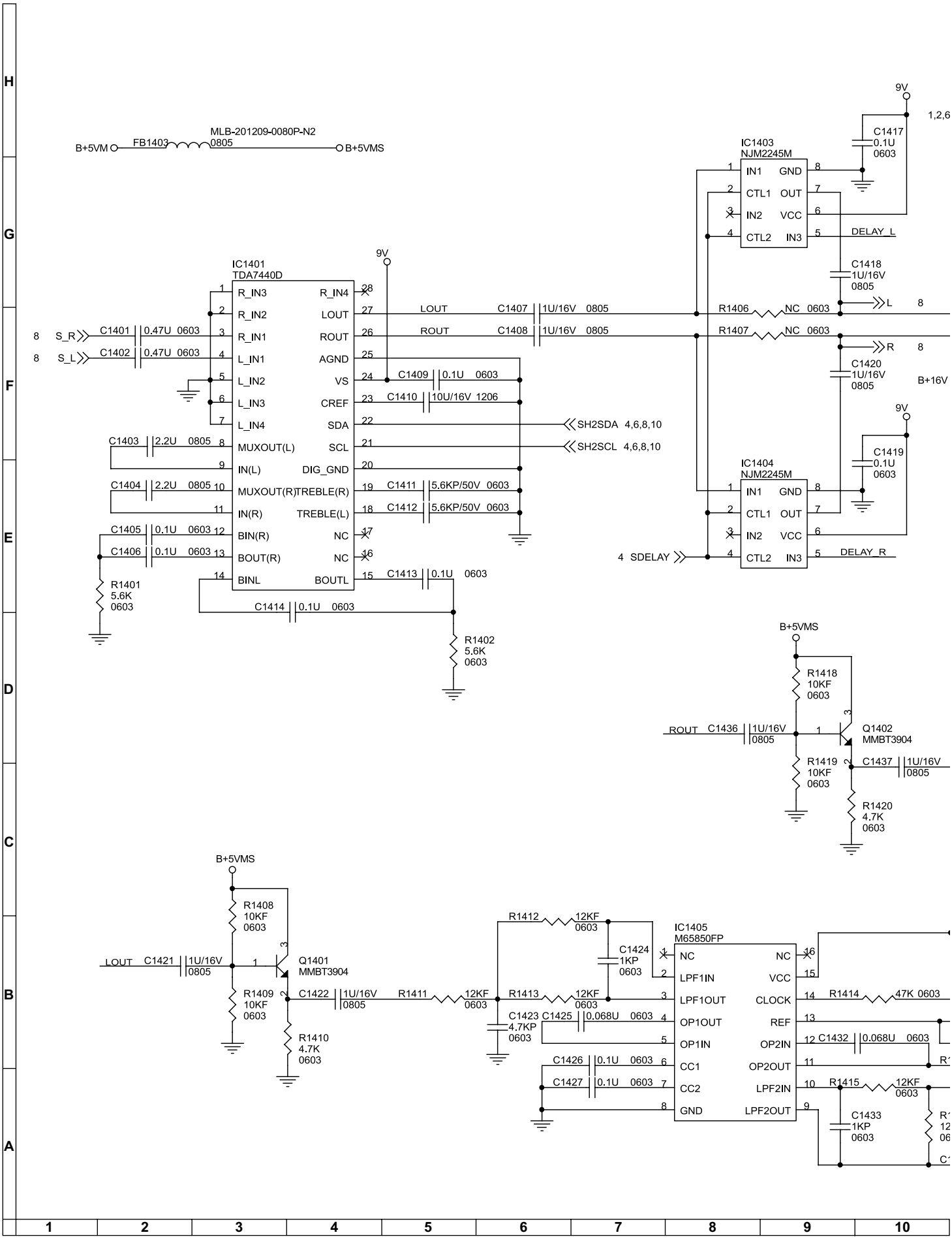

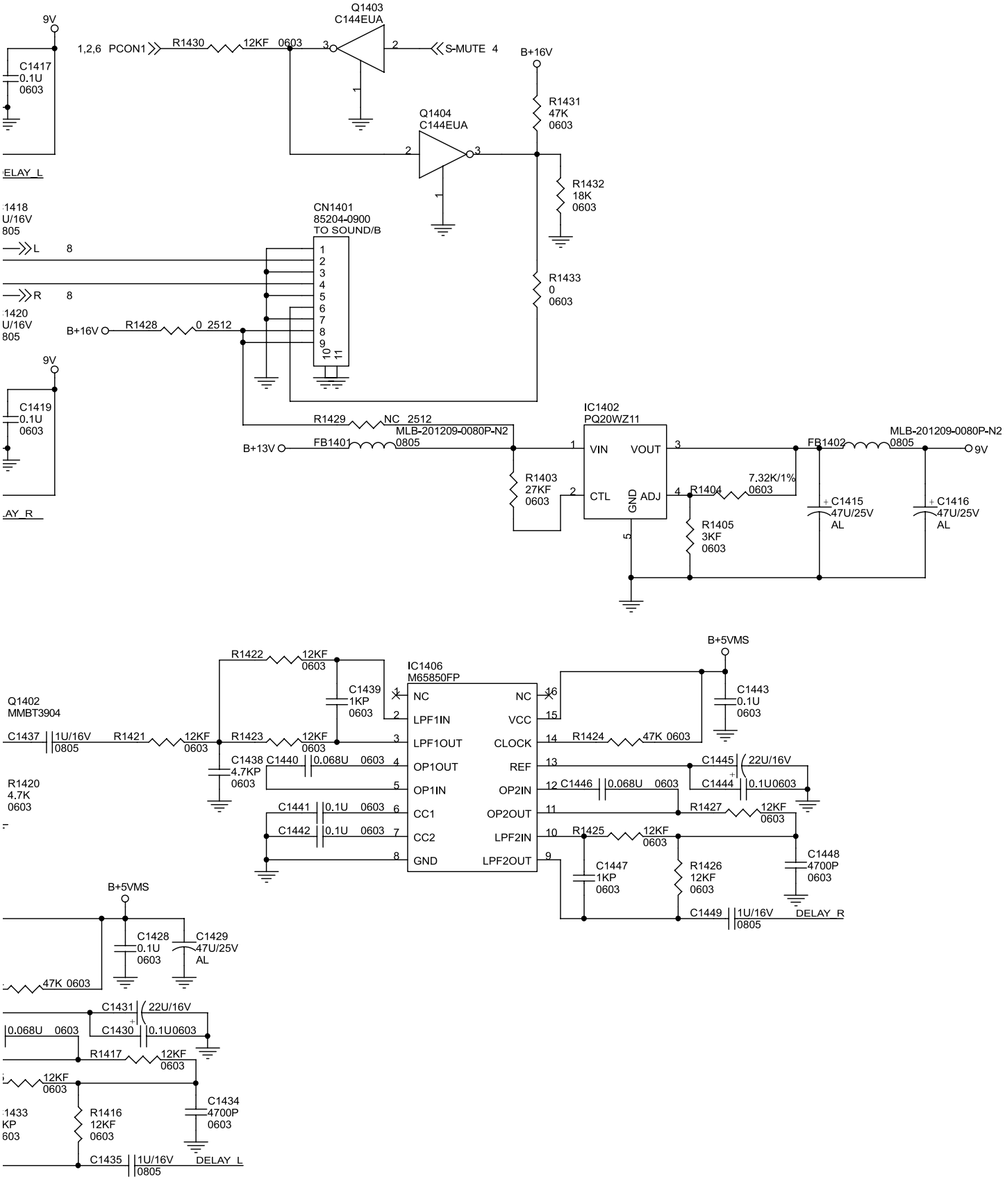

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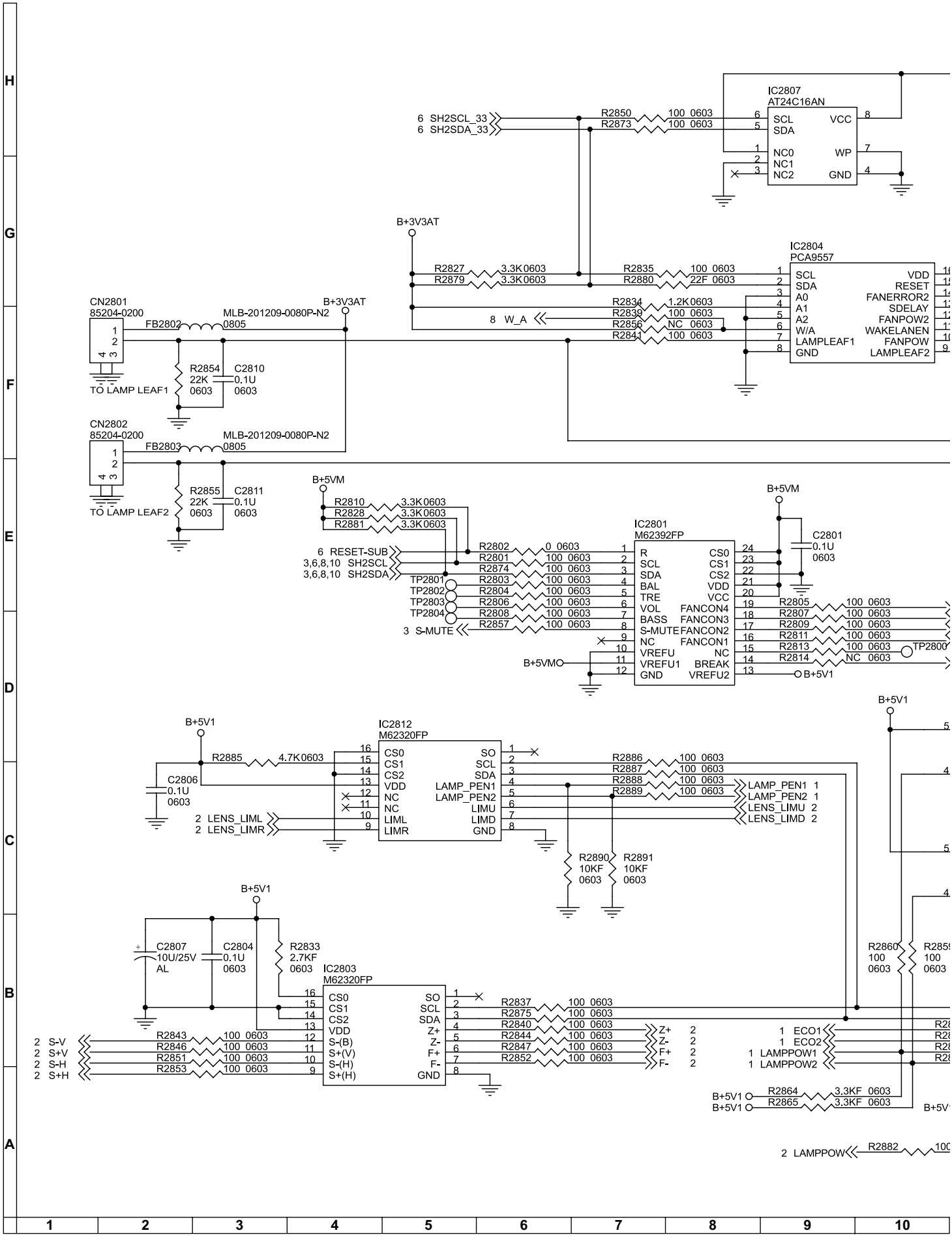

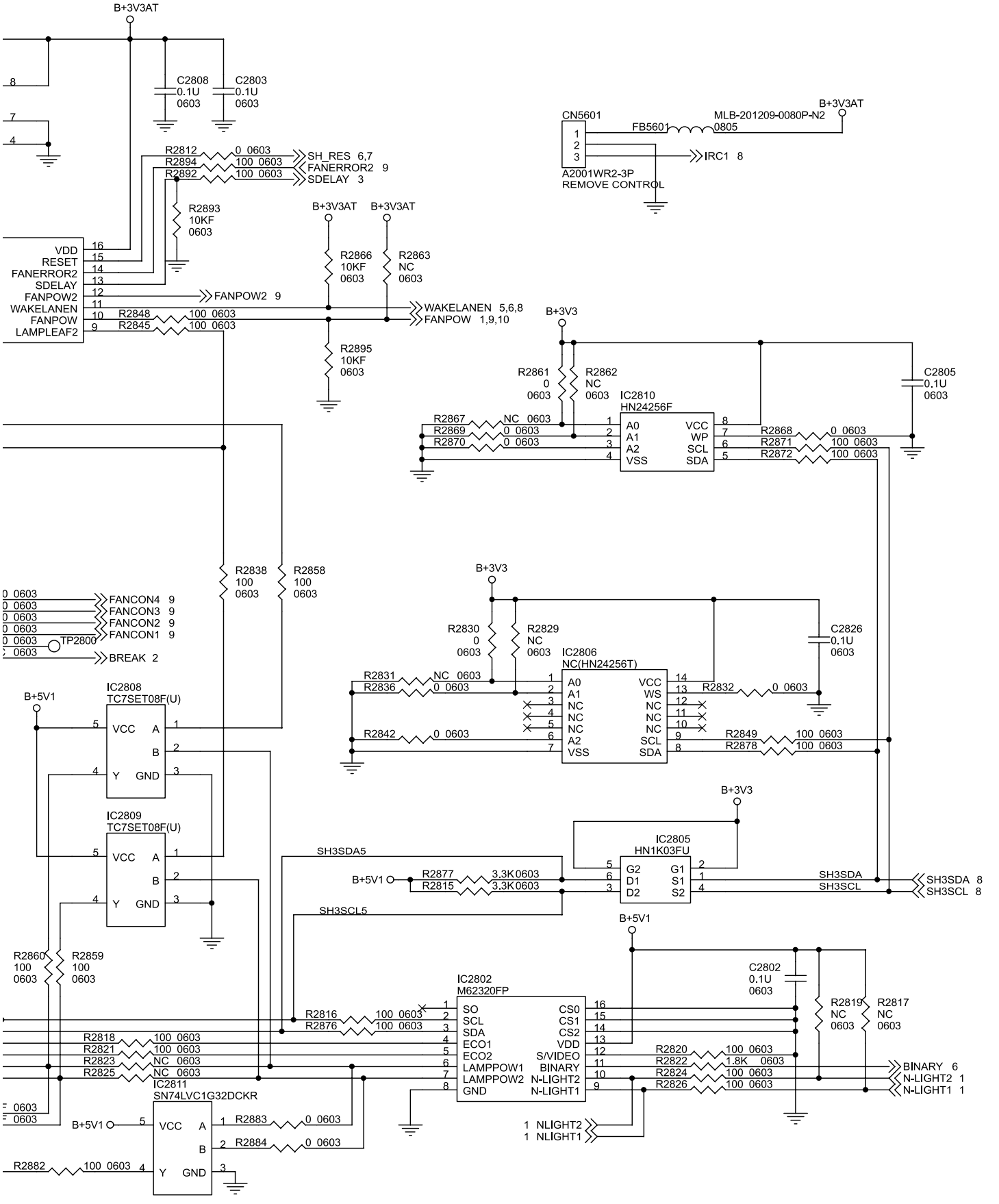

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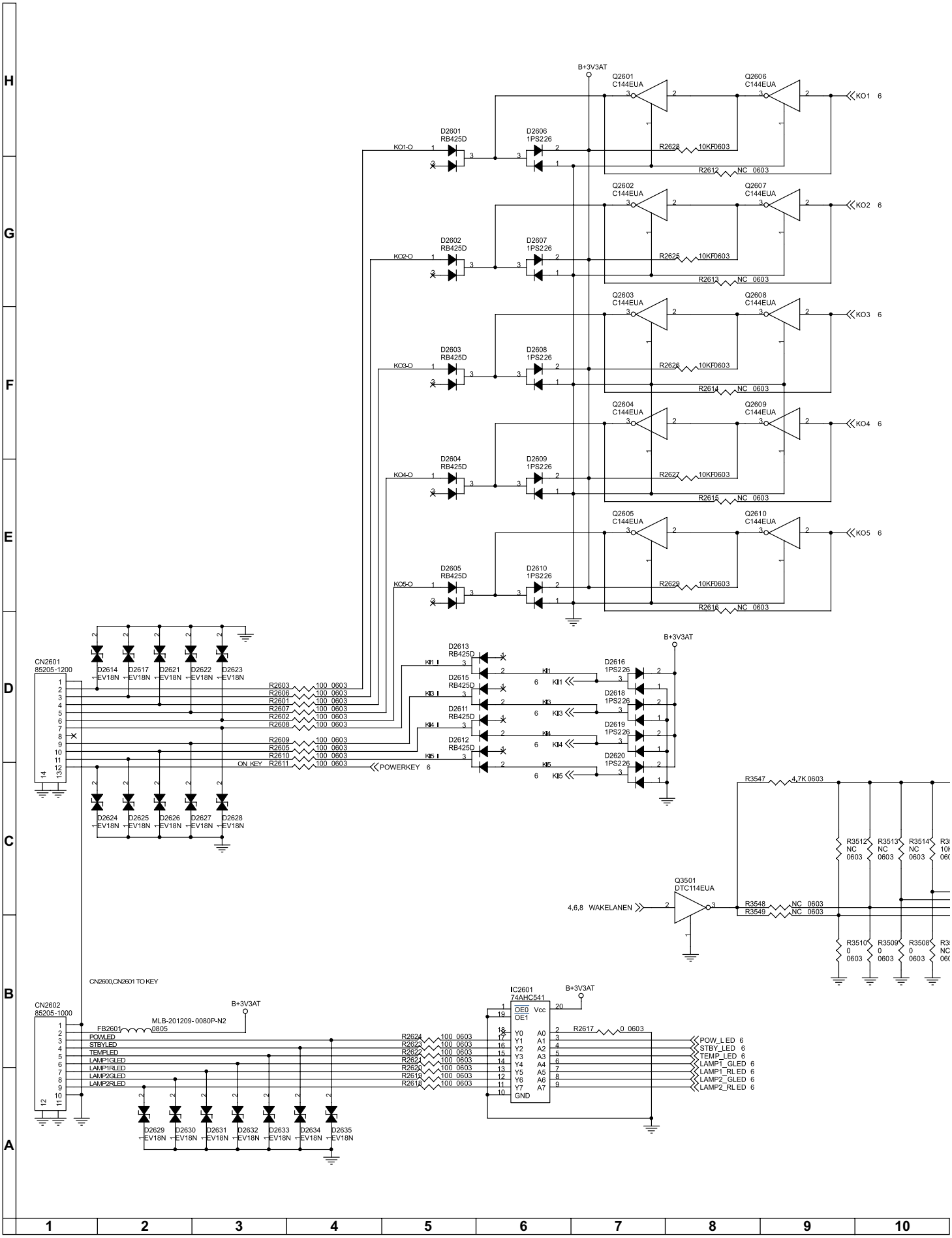
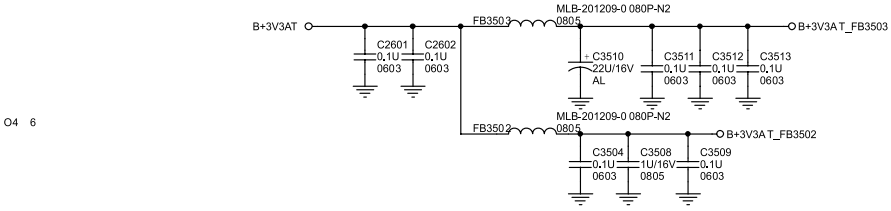
D10

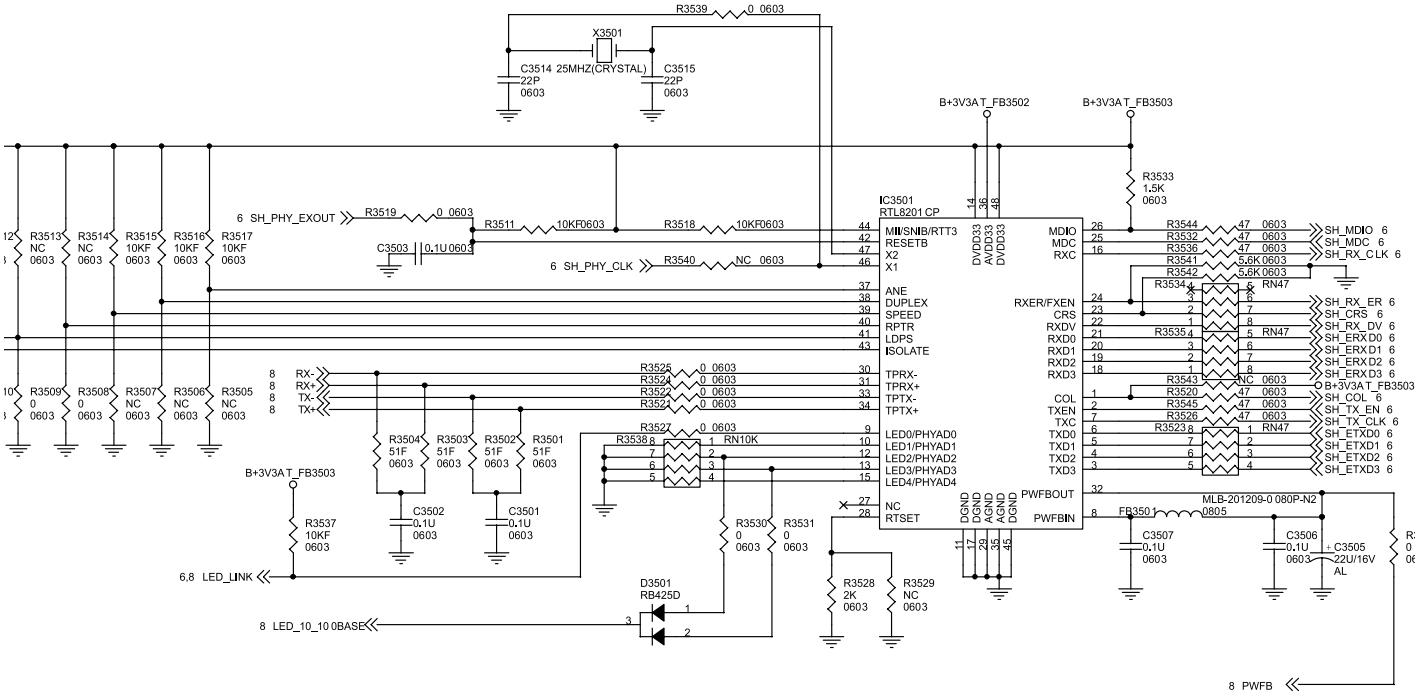
■MAIN UNIT / HAUPTEINHEIT-5/10



H G F E D C B A

1 2 3 4 5 6 7 8 9 10





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D12

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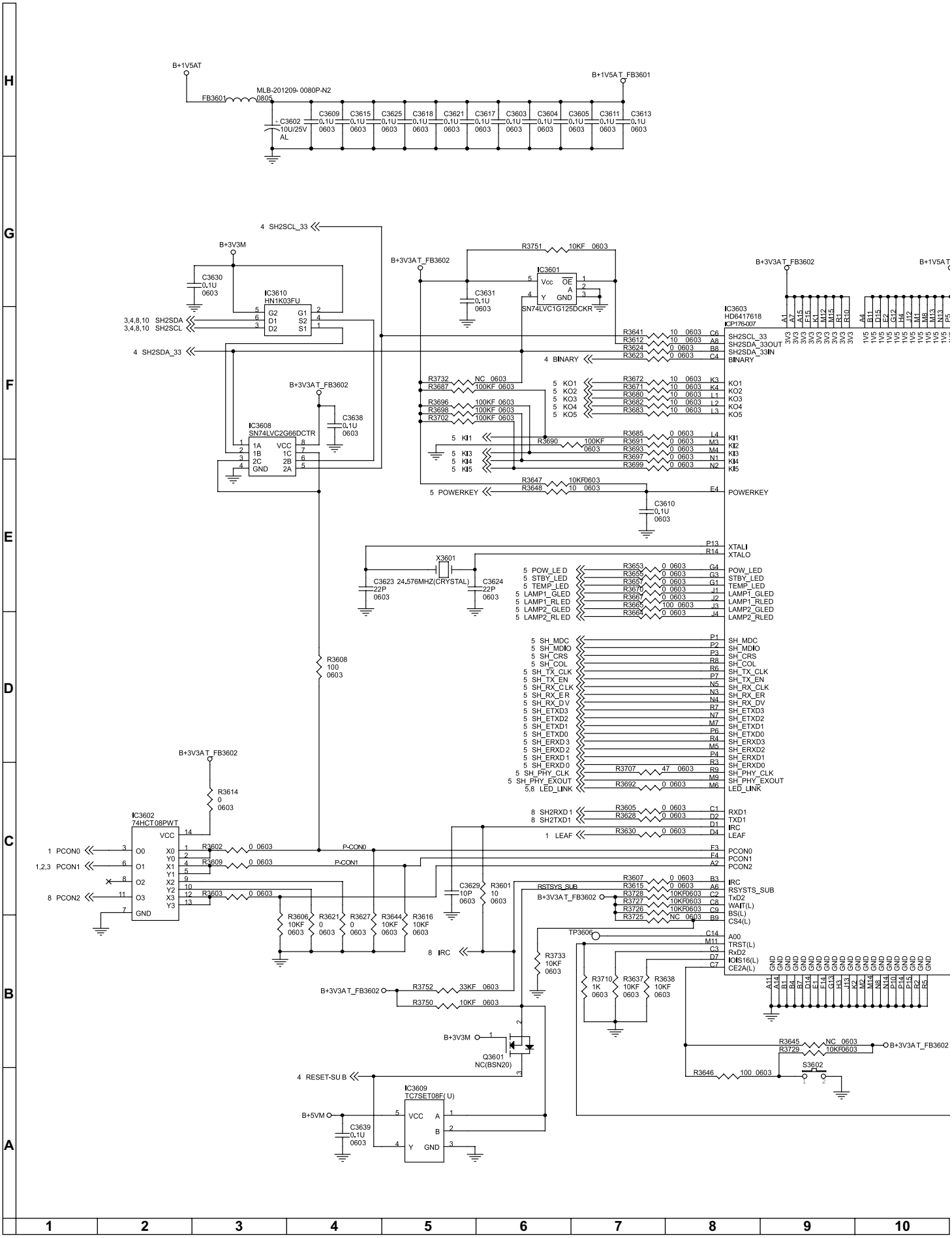

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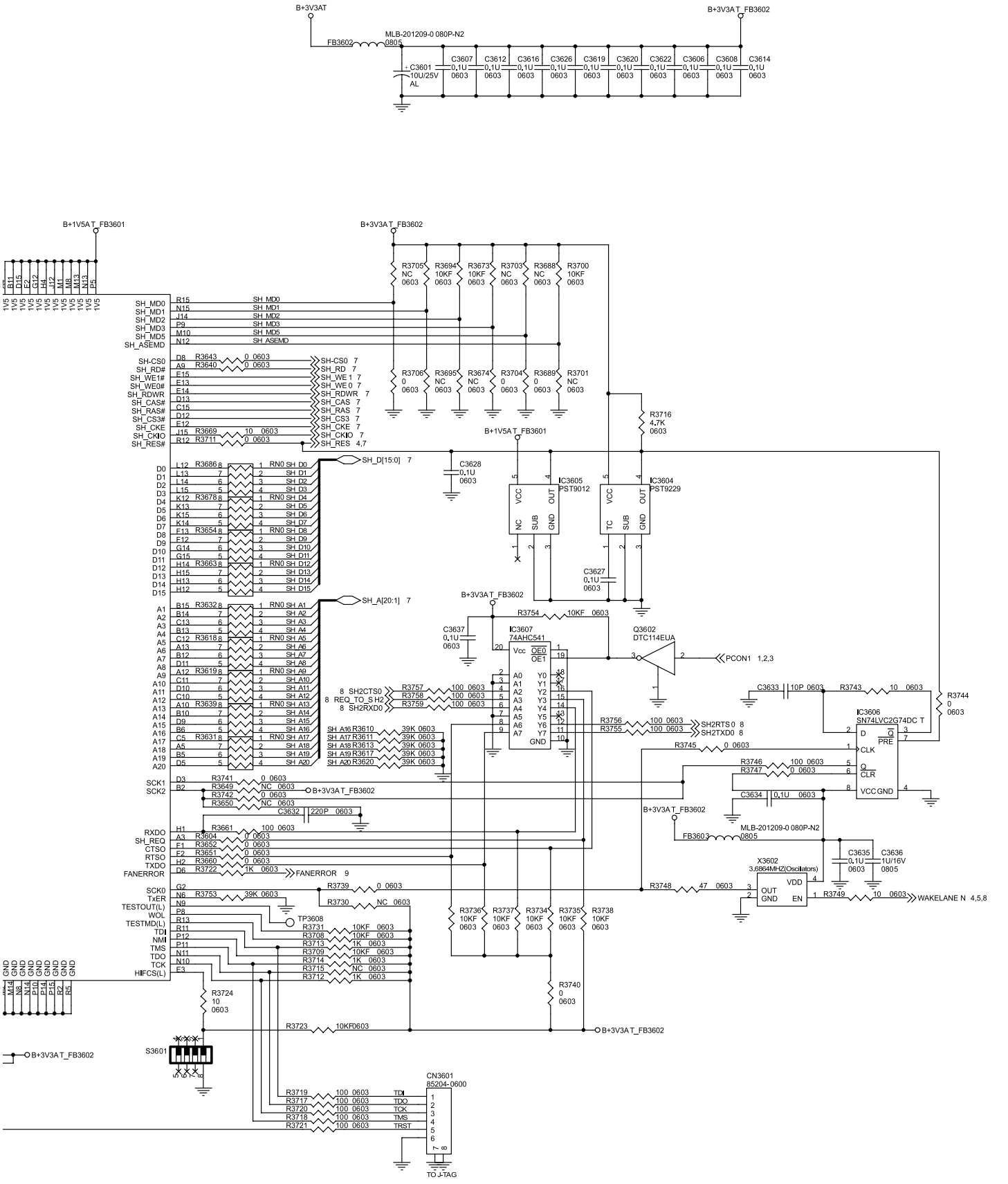

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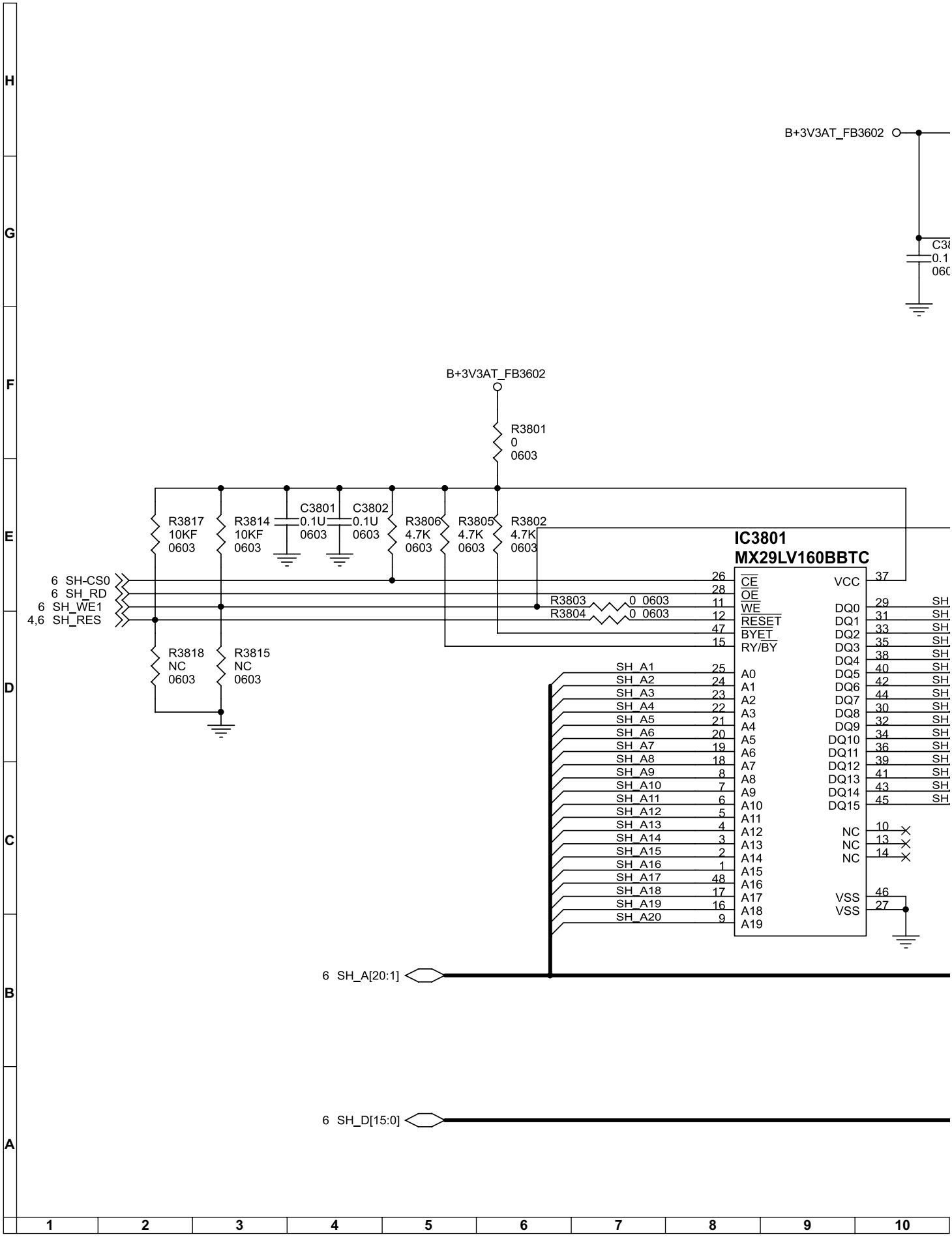
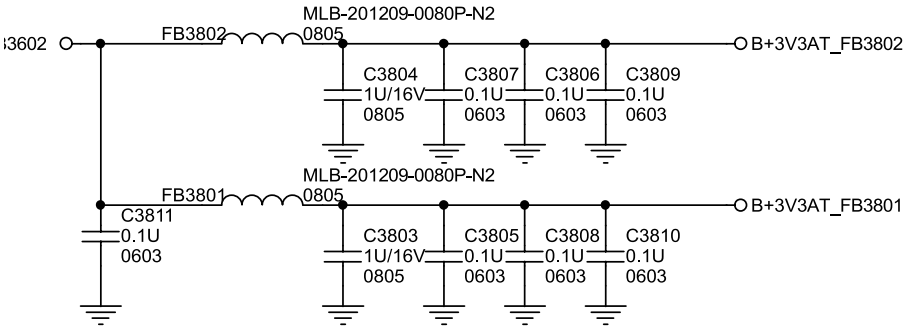
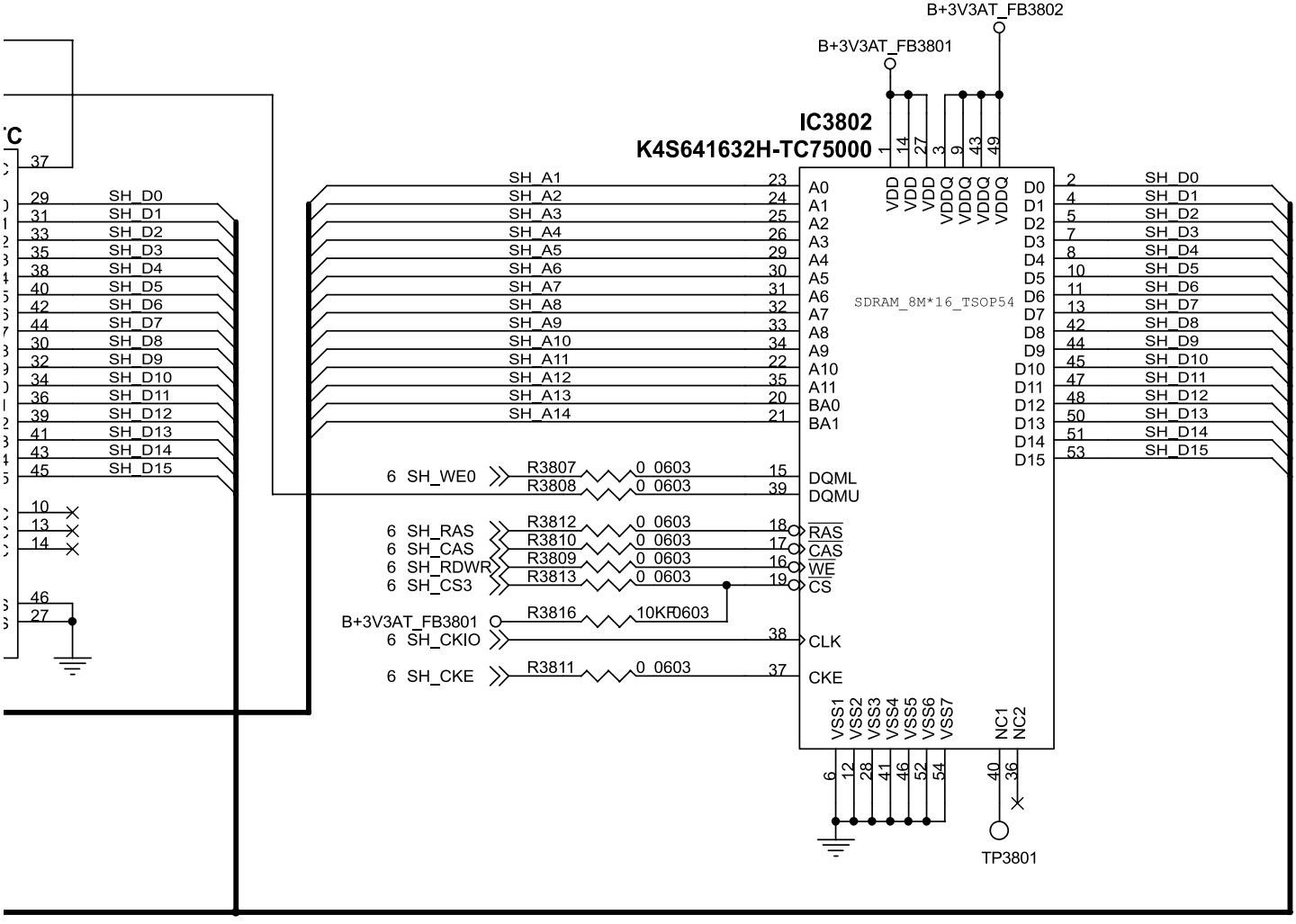
■MAIN UNIT / HAUPTEINHEIT-7/10







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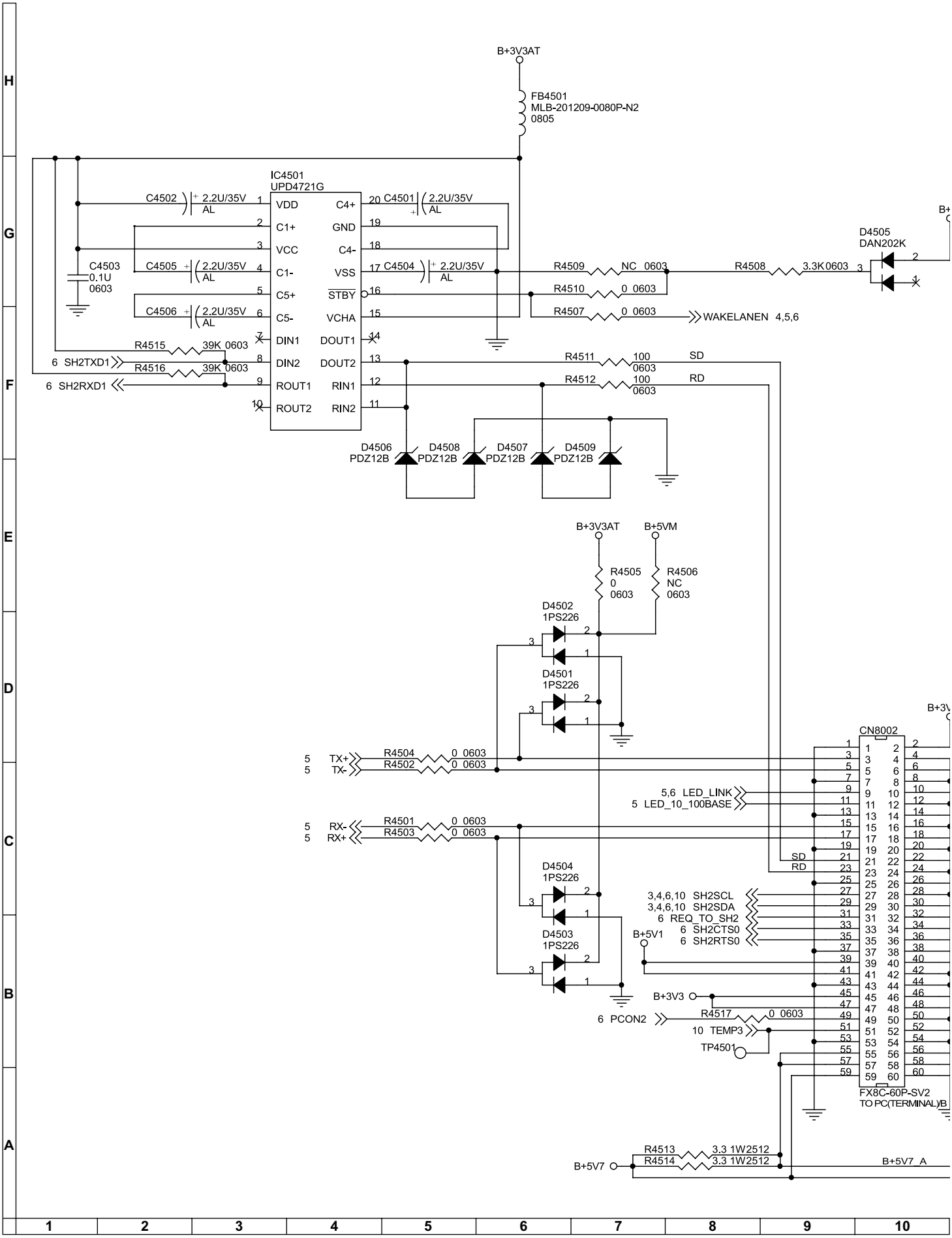
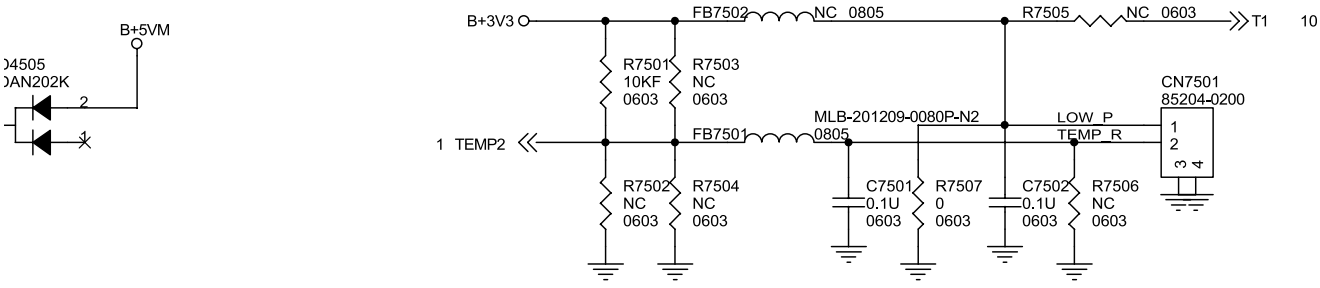
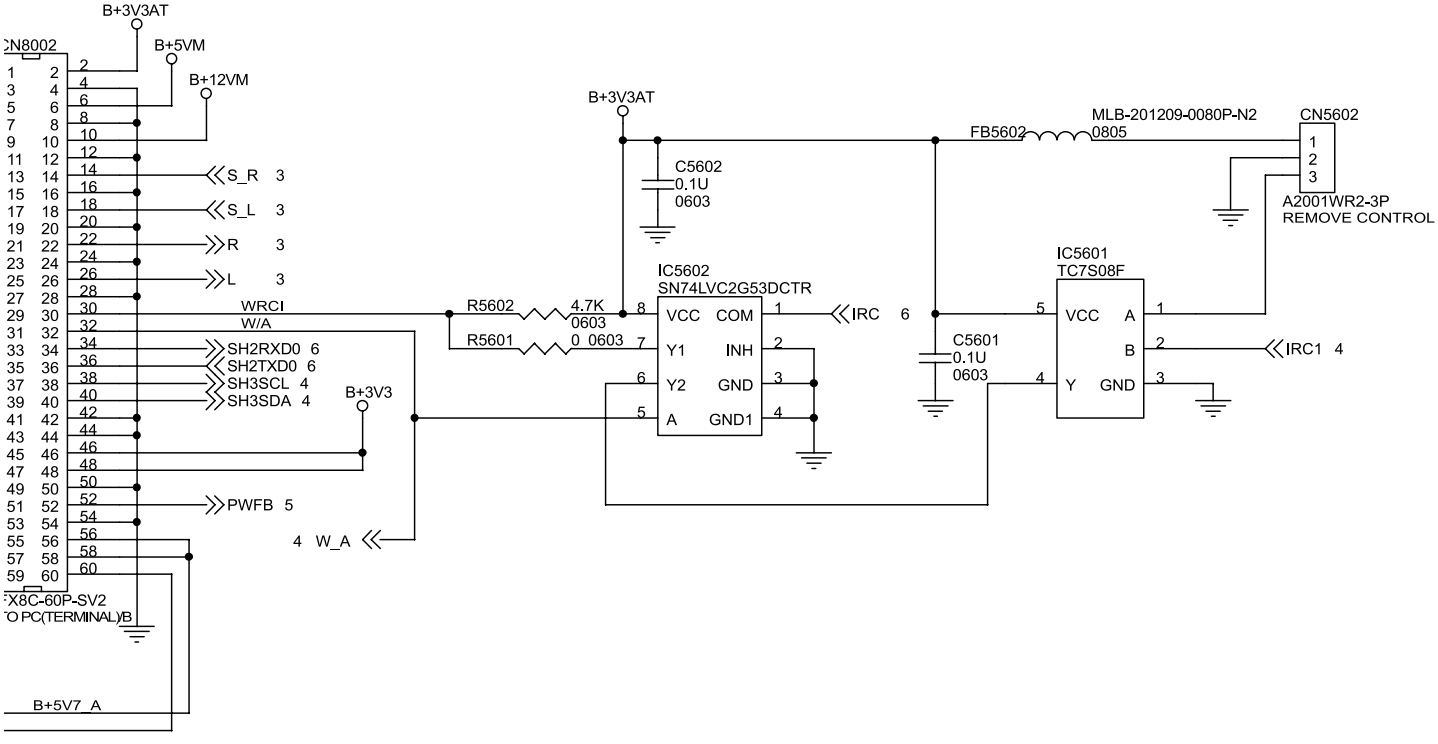
■MAIN UNIT / HAUPTEINHEIT-8/10







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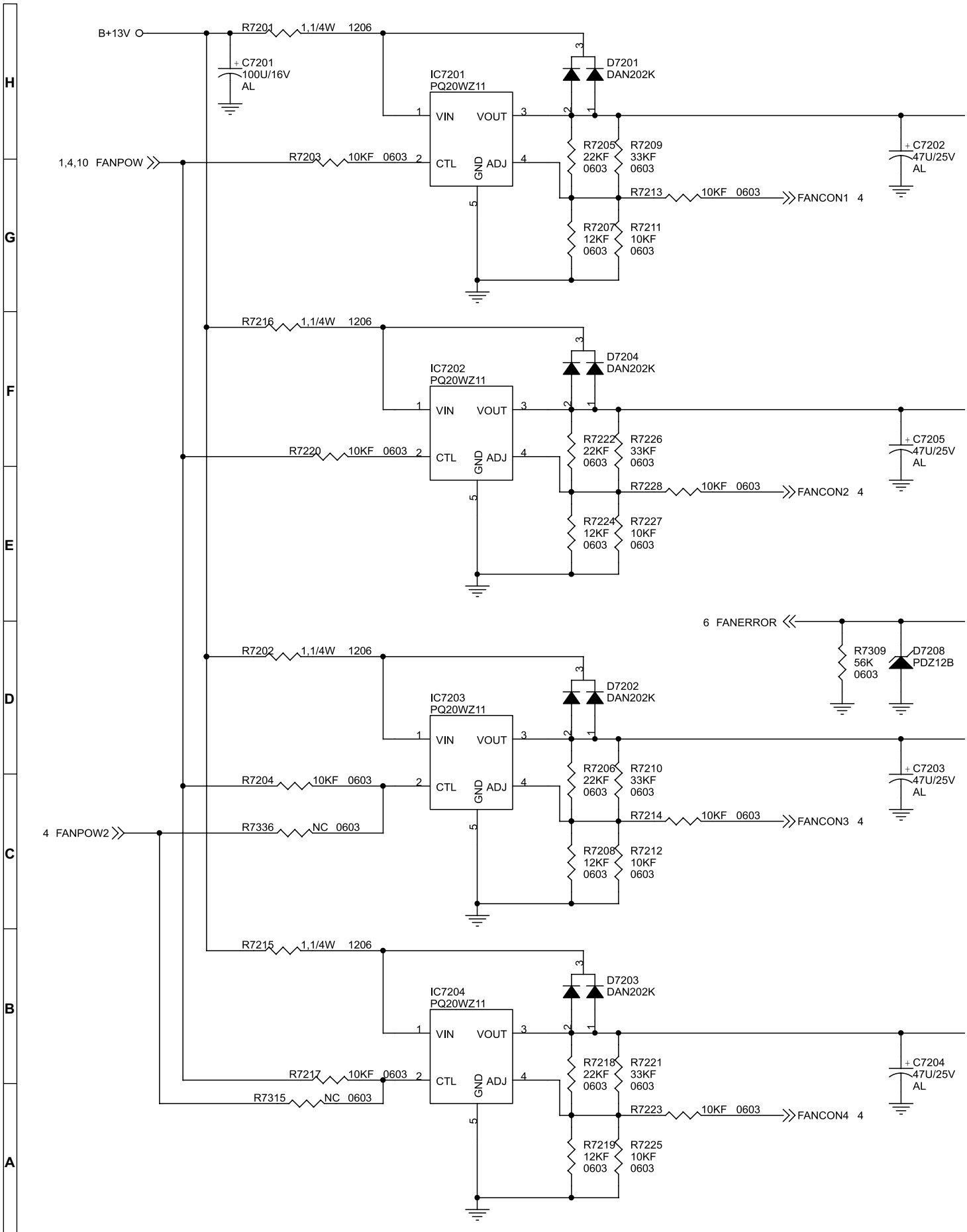
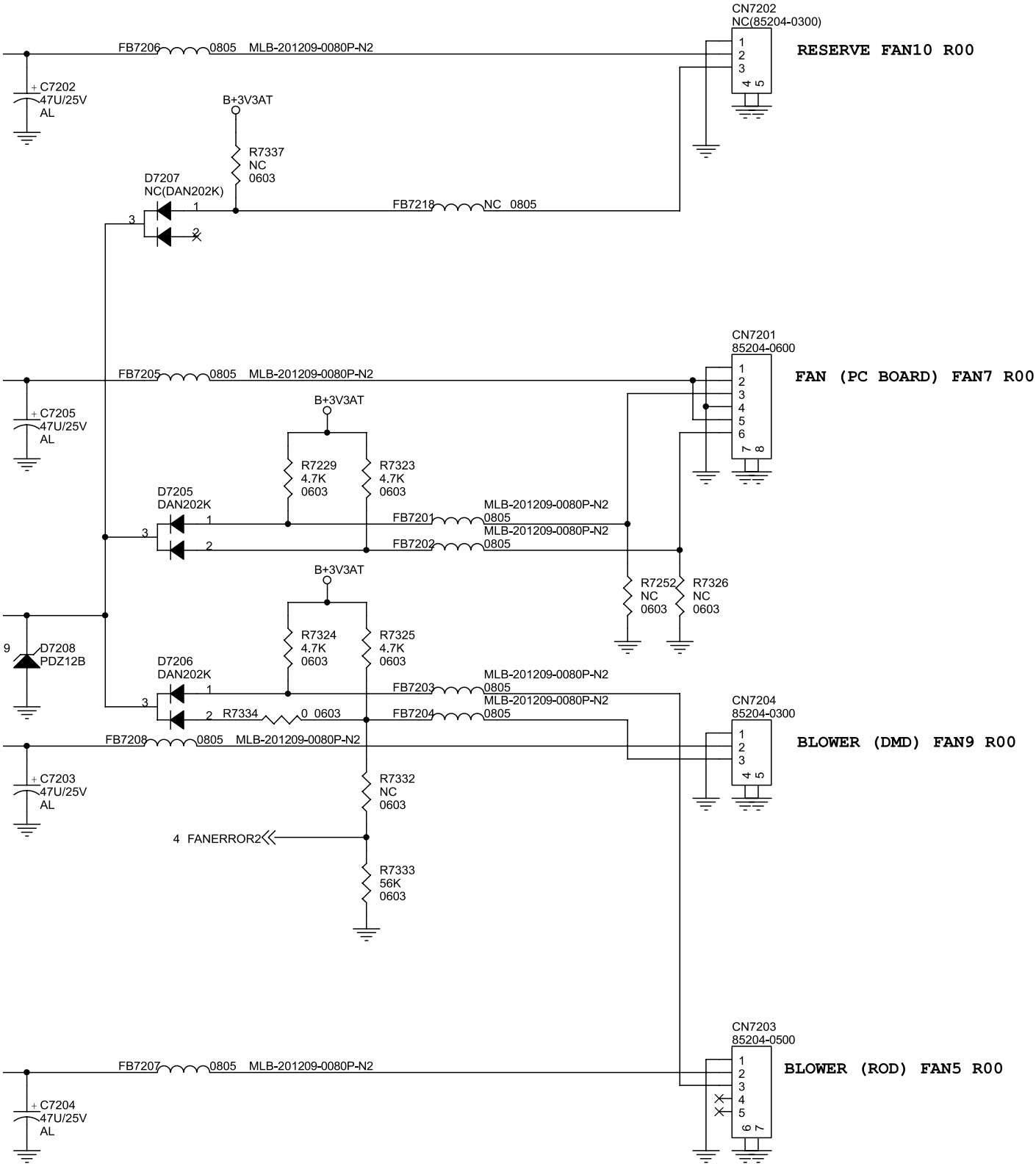
■MAIN UNIT / HAUPTEINHEIT-9/10





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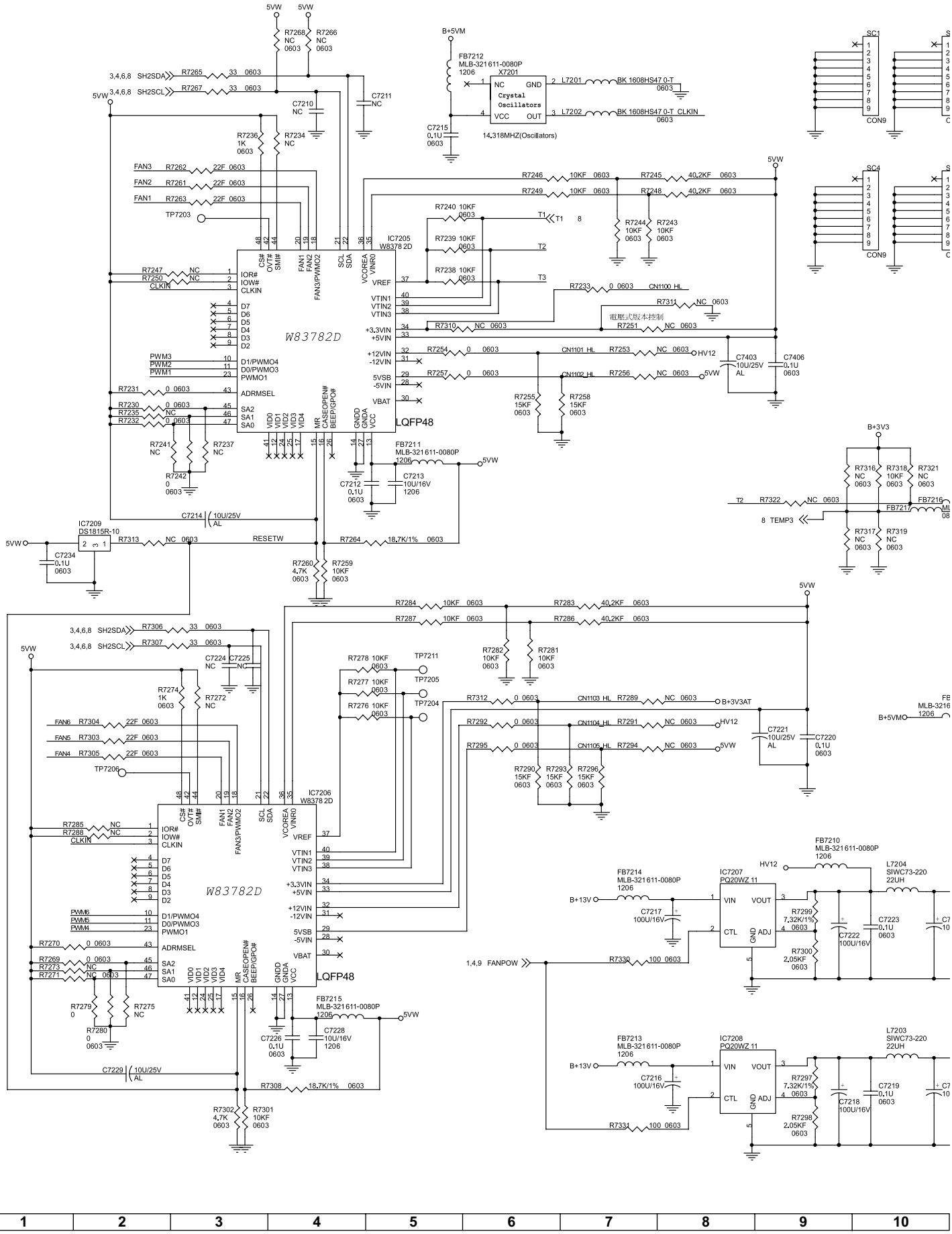
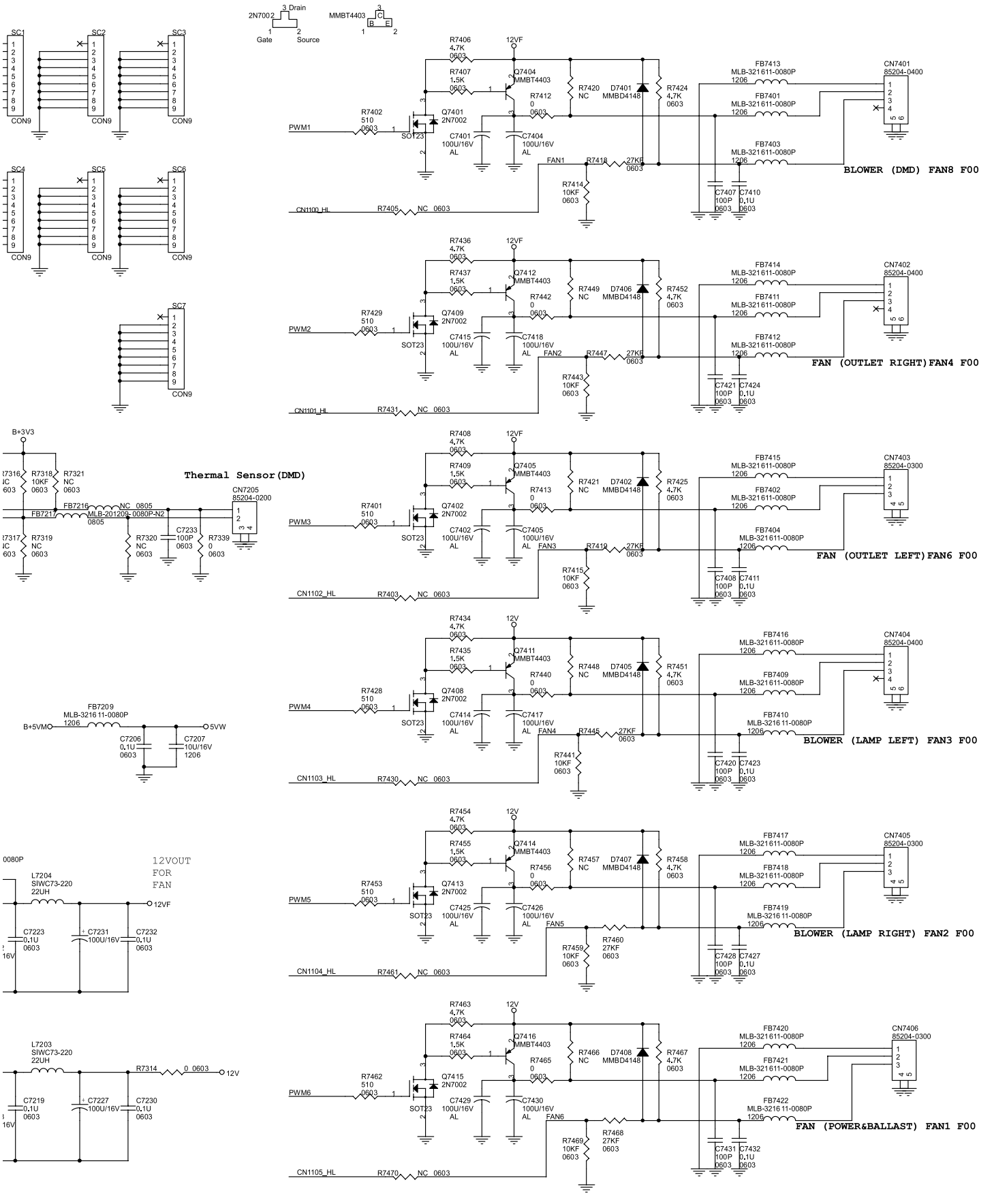
■MAIN UNIT / HAUPTEINHEIT-10/10





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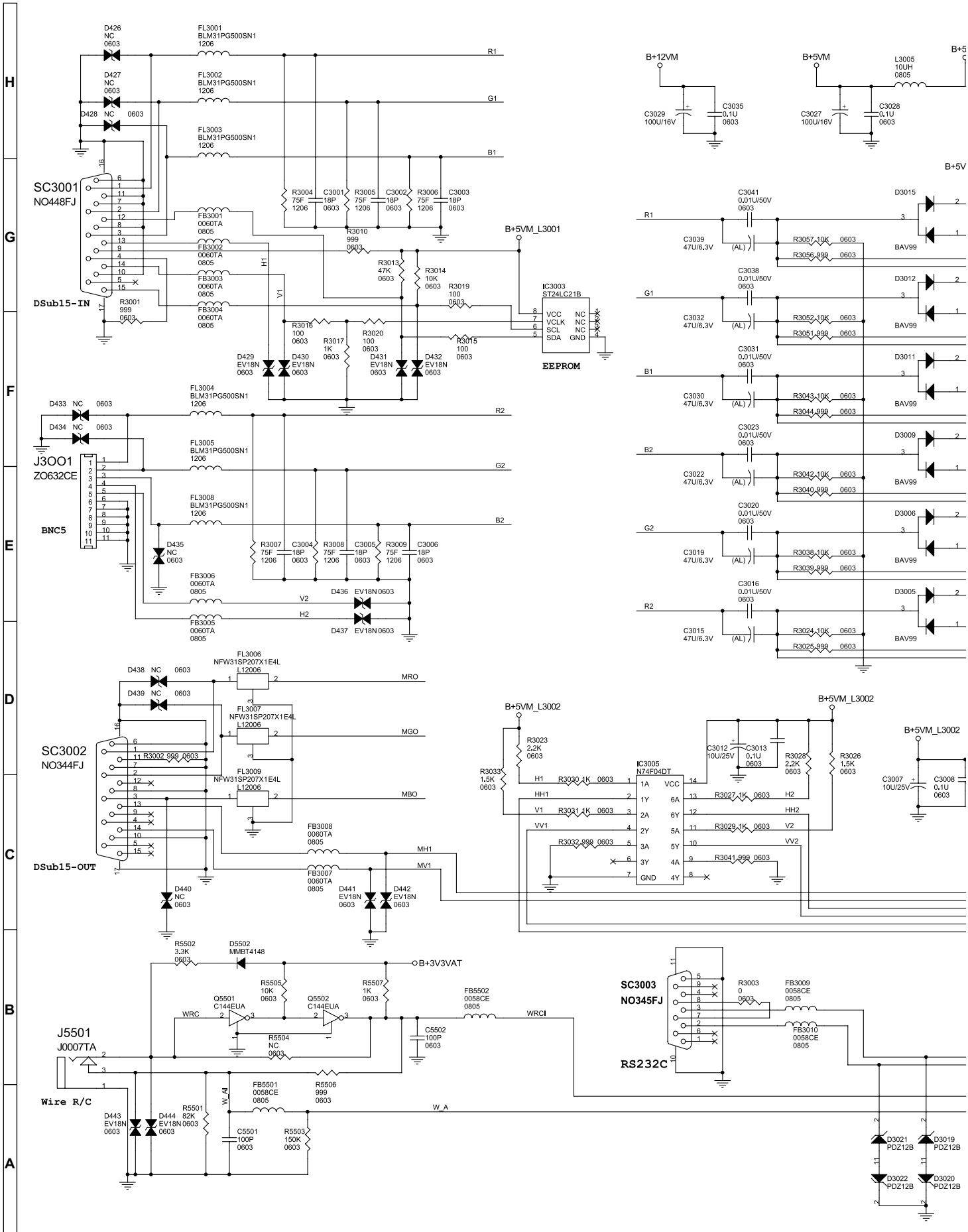
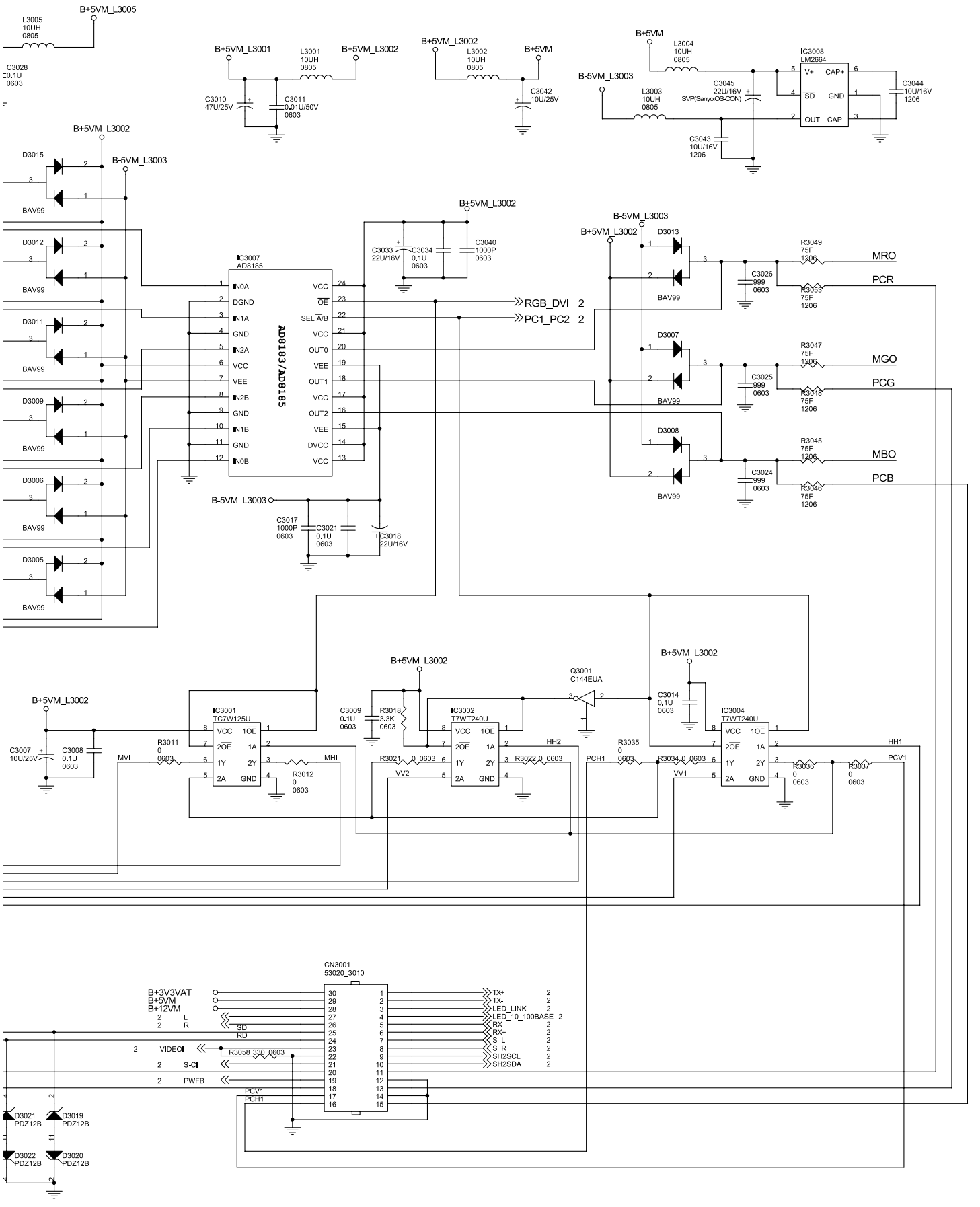
■TERMINAL UNIT / ANSCHLUSSEINHEIT-1/2





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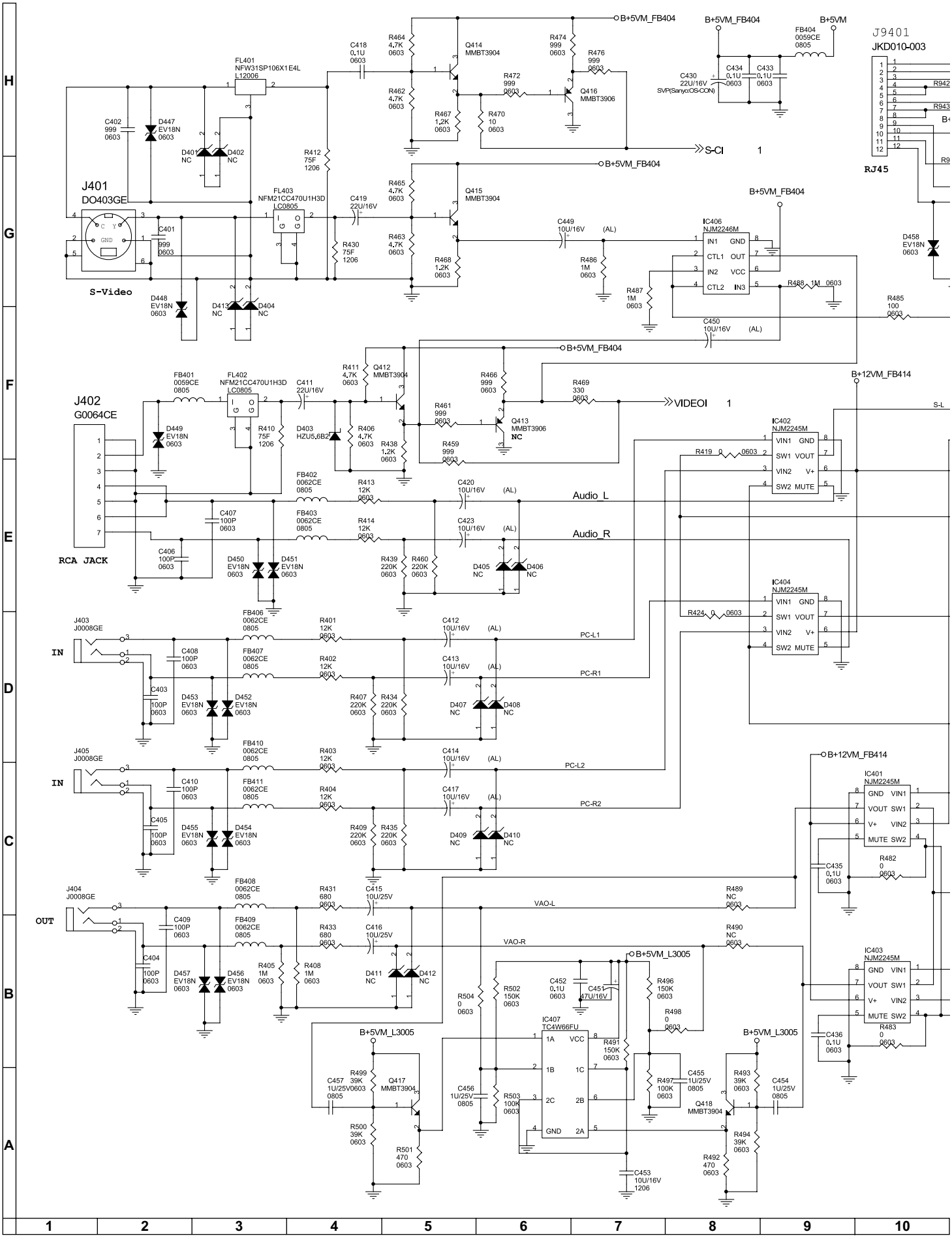
■TERMINAL UNIT / ANSCHLUSSEINHEIT-2/2



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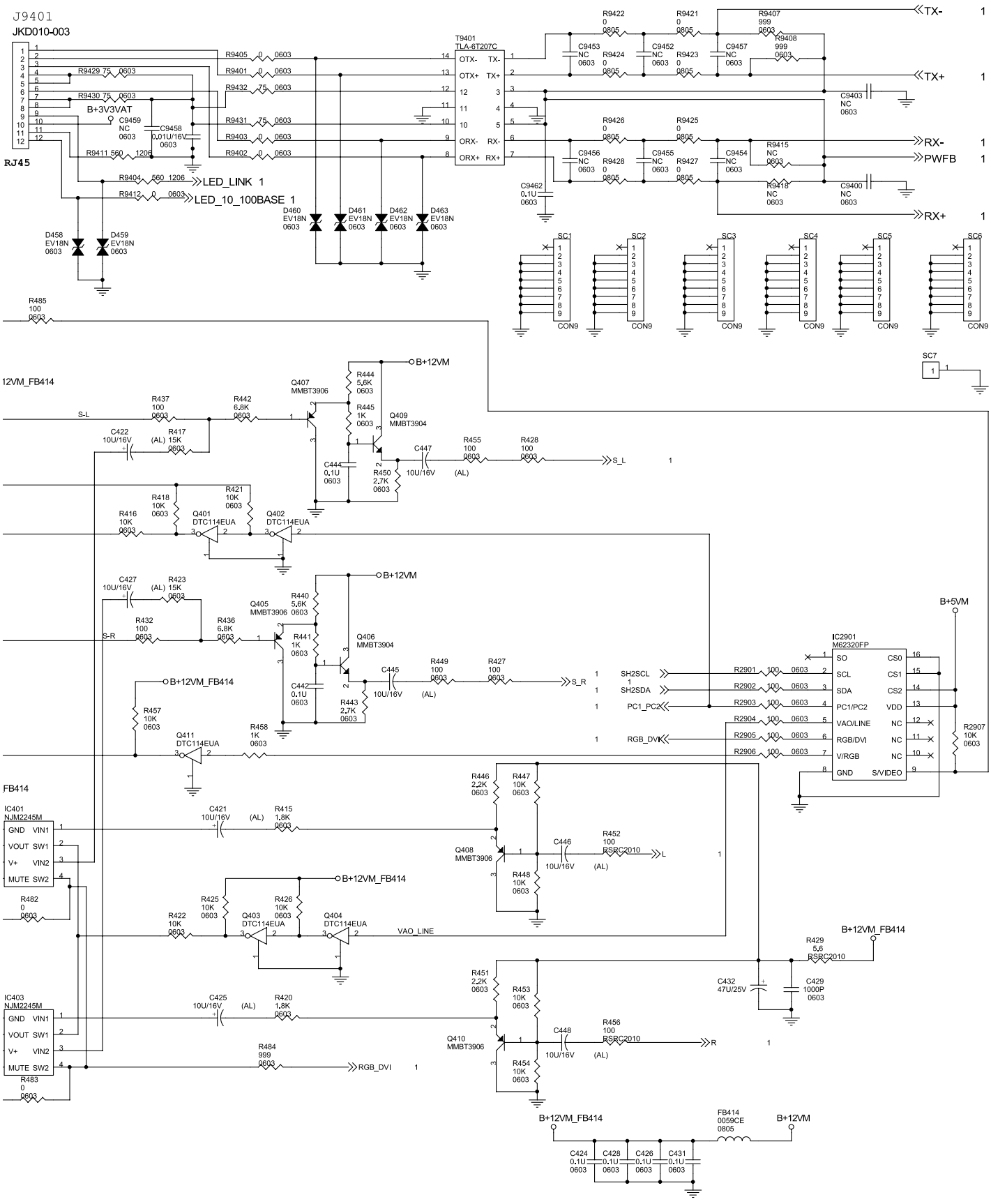

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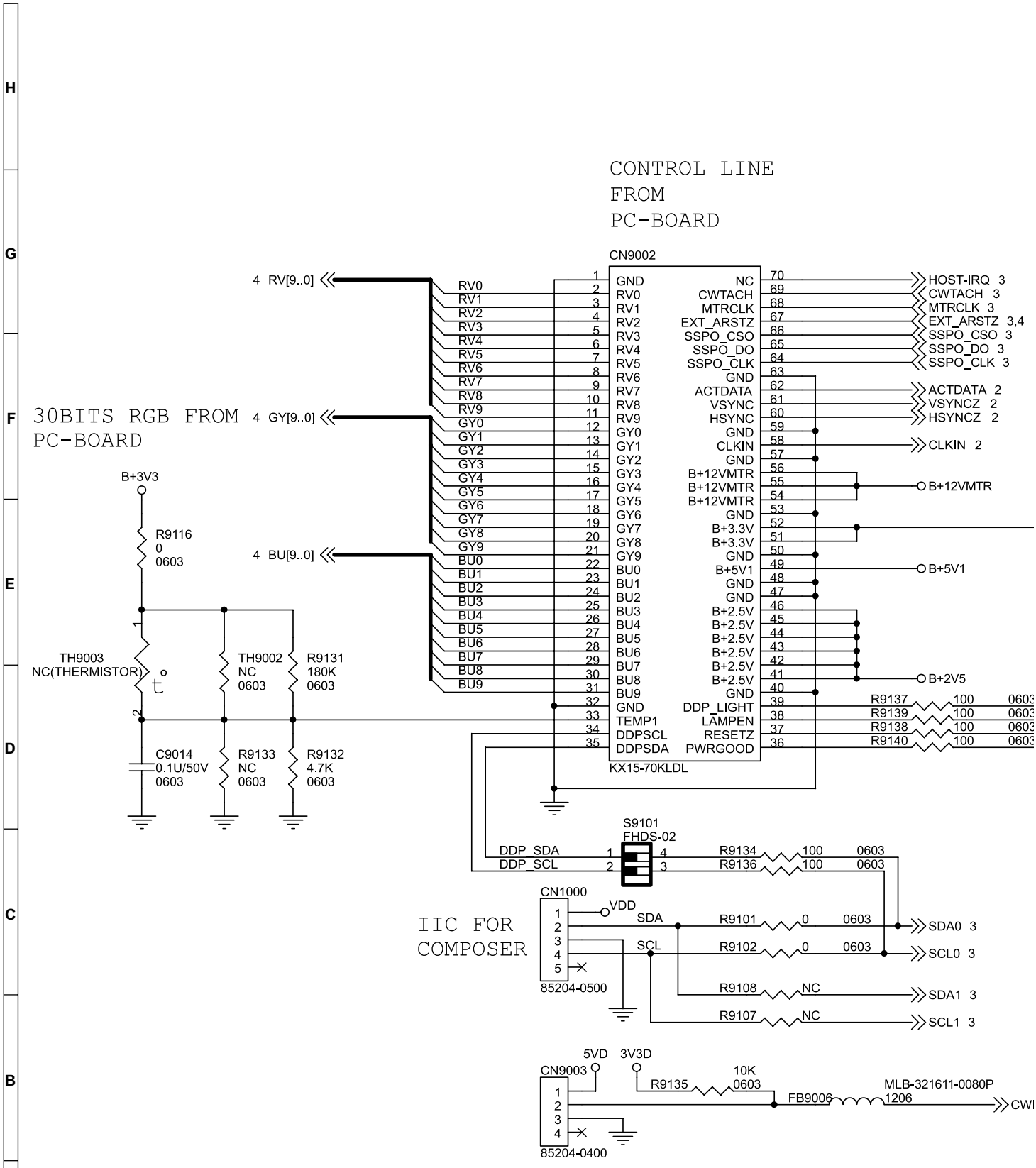
■FORMATTER UNIT / FORMATIERE REINHEIT-1/6



HOST-IRQ 3
CWTACH 3
MTRCLK 3
EXT_ARSTZ 3,4
SPO_CSO 3
SPO_DO 3
SPO_CLK 3

ACTDATA 2
VSYNCZ 2
HSYNCZ 2

CLKIN 2

B+12VMTR

B+3V3

B+5V1

B+2V5

100 0603 LAMPLITZ 2
100 0603 LAMPEN 2
100 0603 RESETZ
100 0603 POWERGOOD 2

C9501 NC 0603
R9319 10K 0603

SDA0 3
SCL0 3

SDA1 3
SCL1 3

611-0080P
CWINDEX 3

B+5V1 FB9000 MLB-321611-0080P 1206 VDD
5VD

B+3V3 FB9011 MLB-321611-0080P 1206 3V3D
FB9001 MLB-321611-0080P 1206

B+2V5 FB9010 MLB-321611-0080P 1206 P2P5V
FB9002 MLB-321611-0080P 1206

B+12VMTR FB9012 MLB-321611-0080P 1206 P12V

B+5V1
RESETZ
R1000 NC 0603
R1002 NC 0603
R9106 1K 0603
RESETDMD 2
D1000 NC(LM4040-5.0)
Q1000 NC(2N3904)
C9502 NC 0603
R9507 10K 0603
Q1001 NC(2N3904)
R1003 NC

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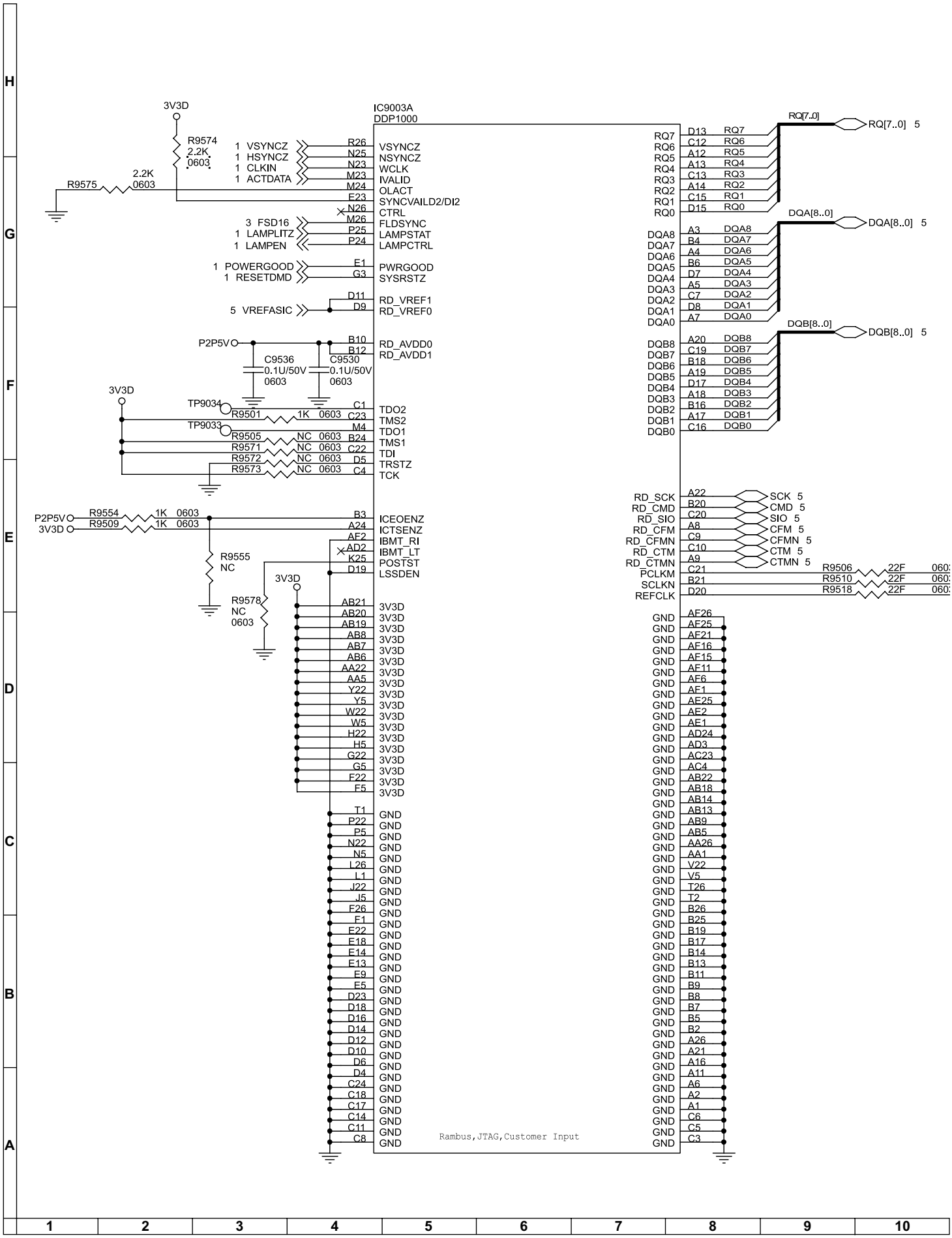
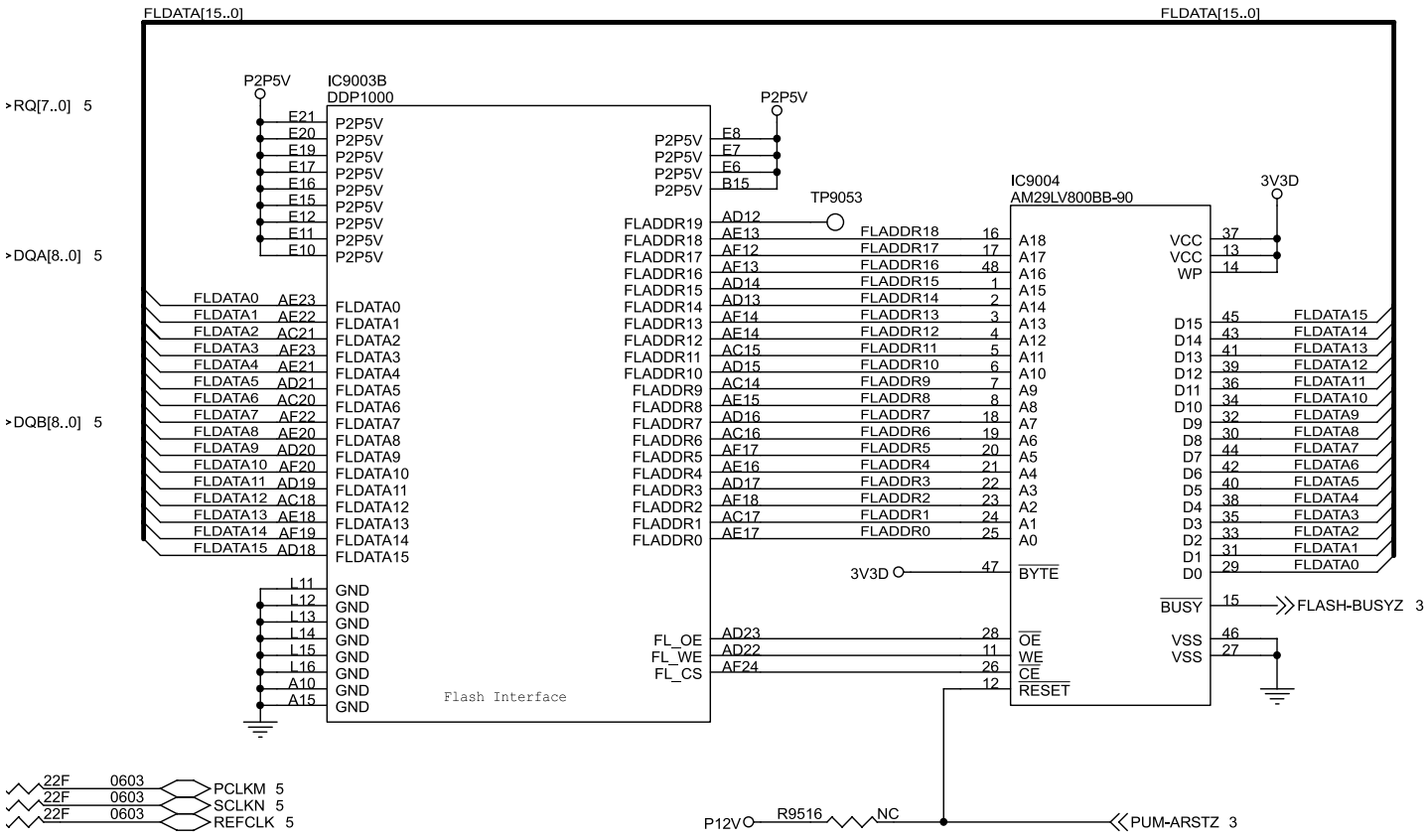
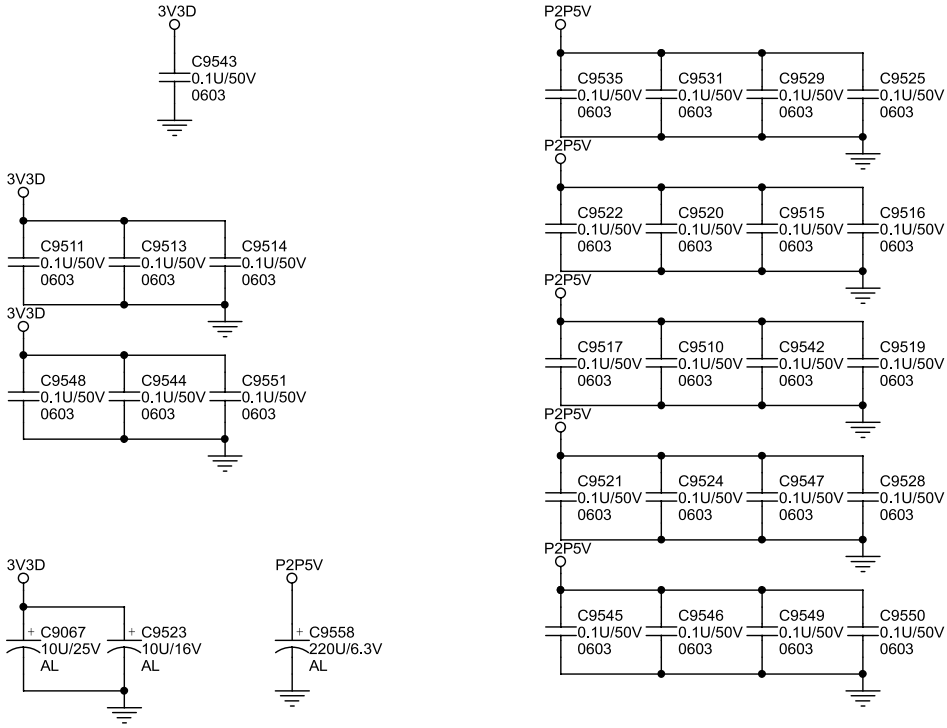
■FORMATTER UNIT / FORMATIERE REINHEIT-2/6







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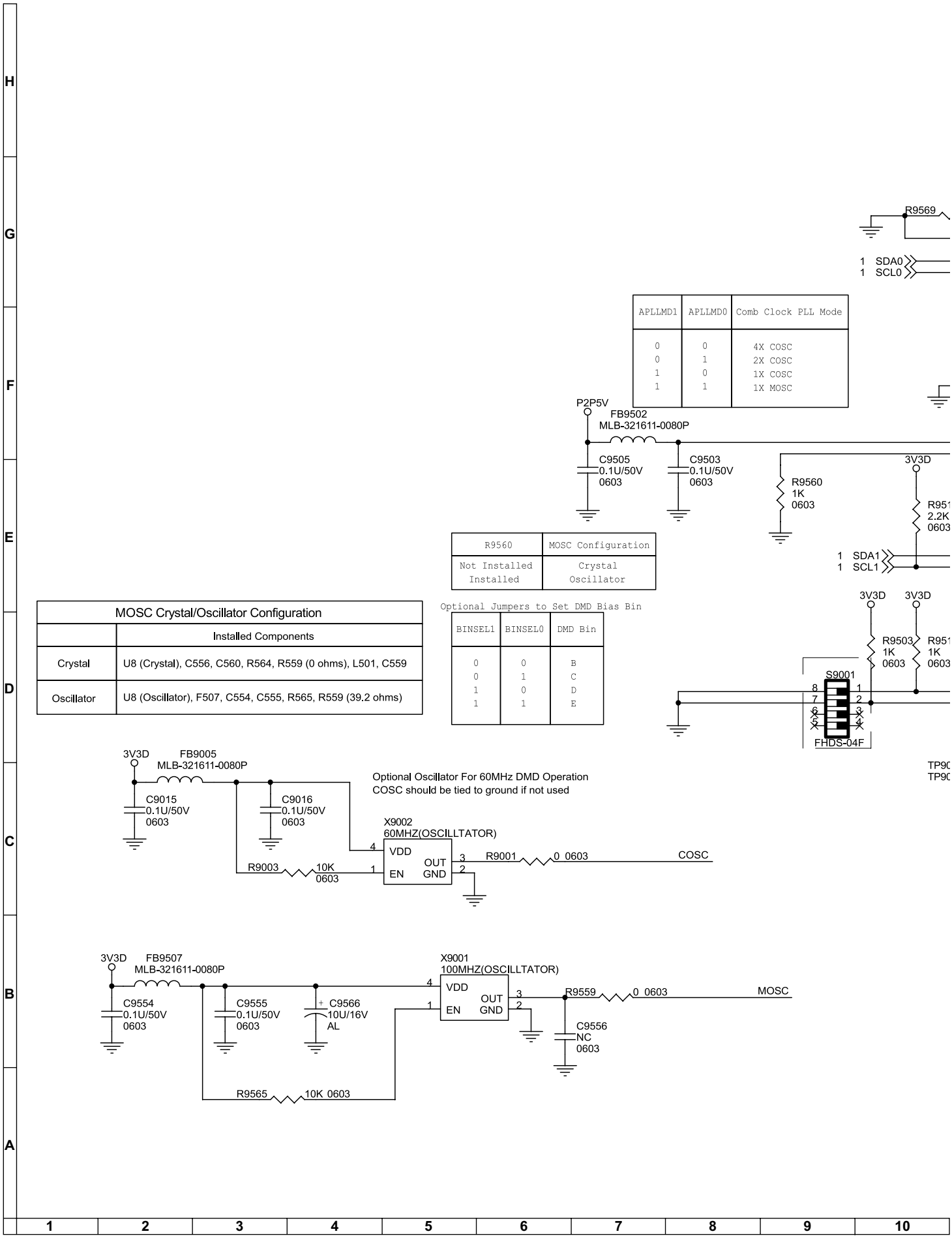

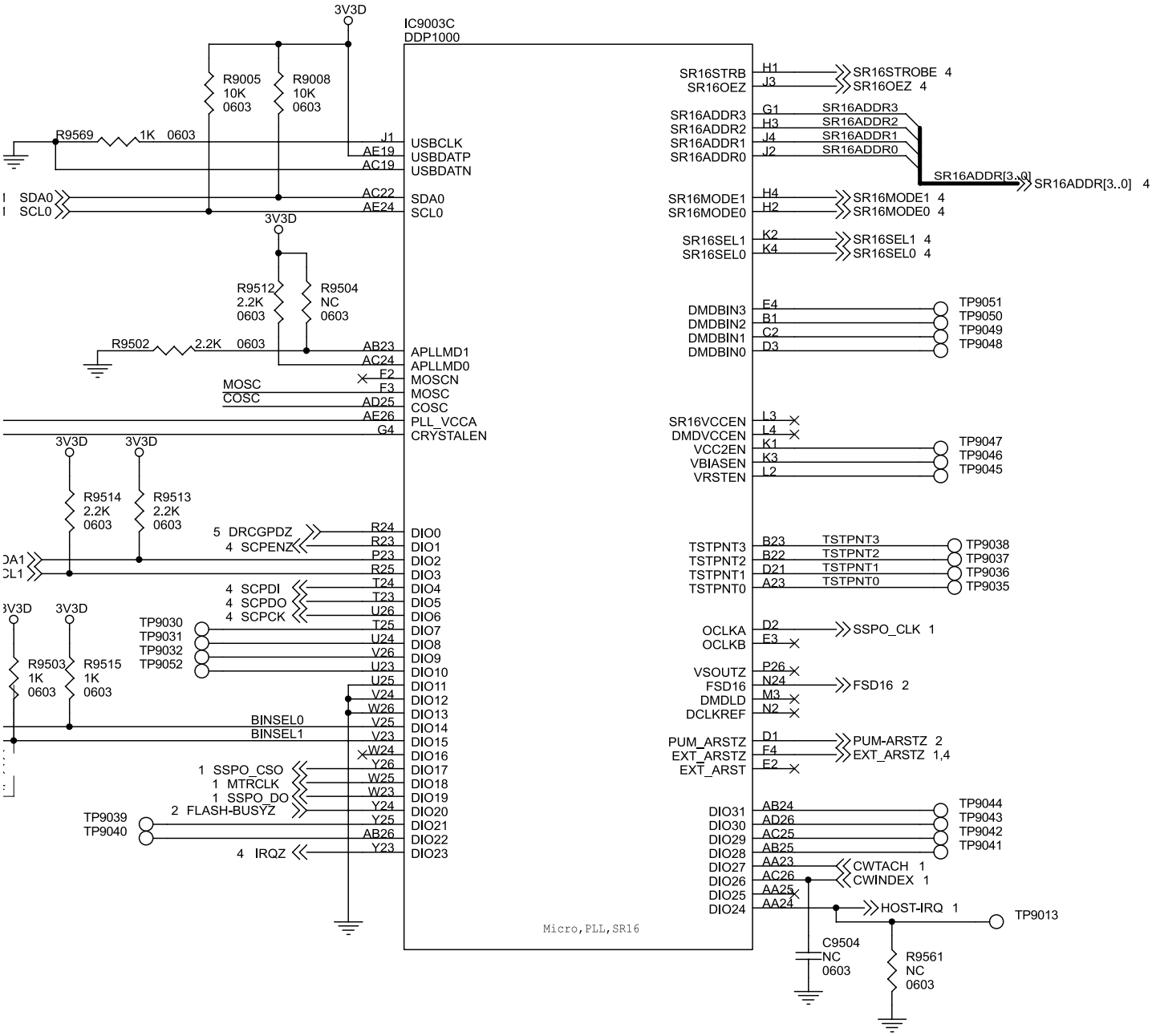

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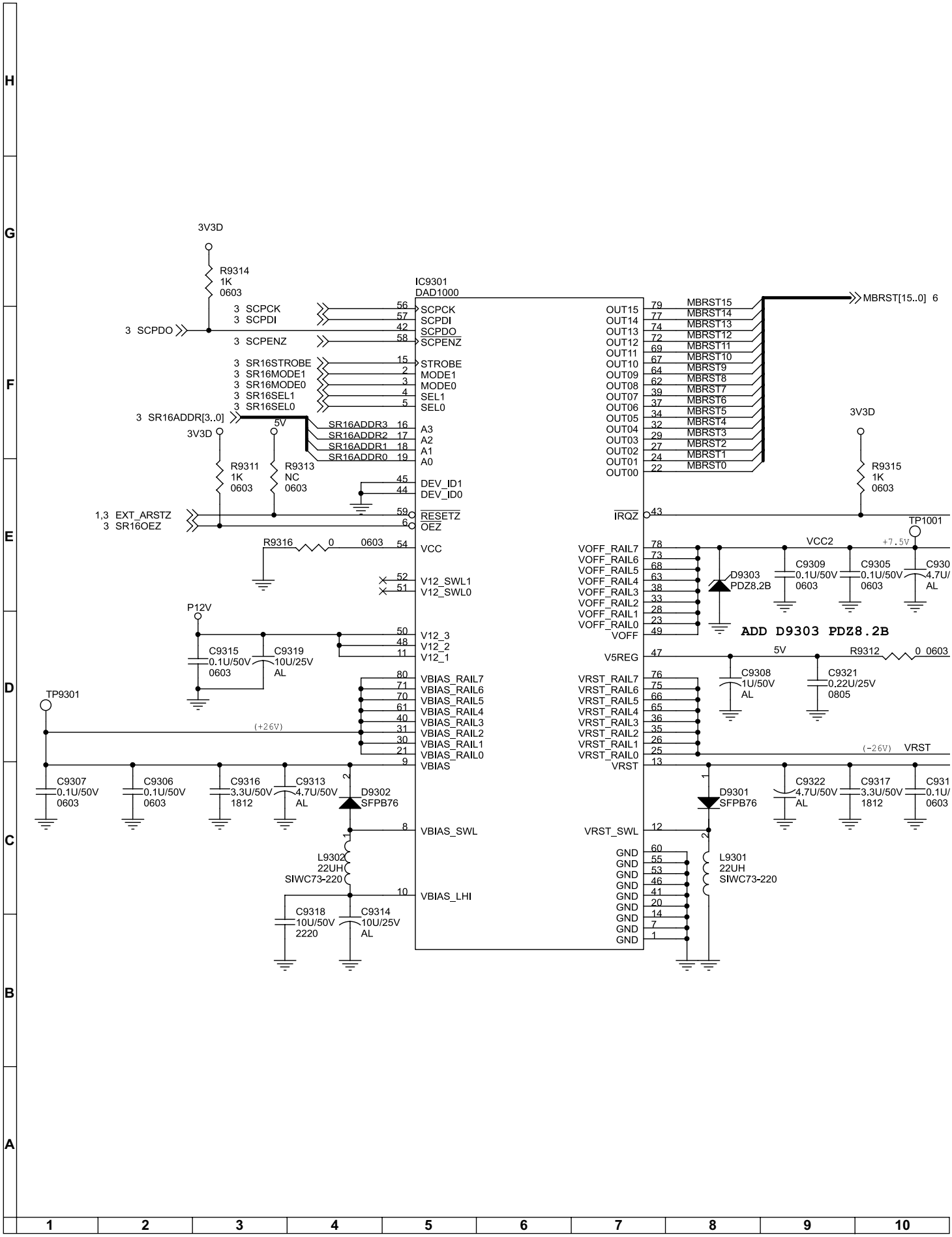
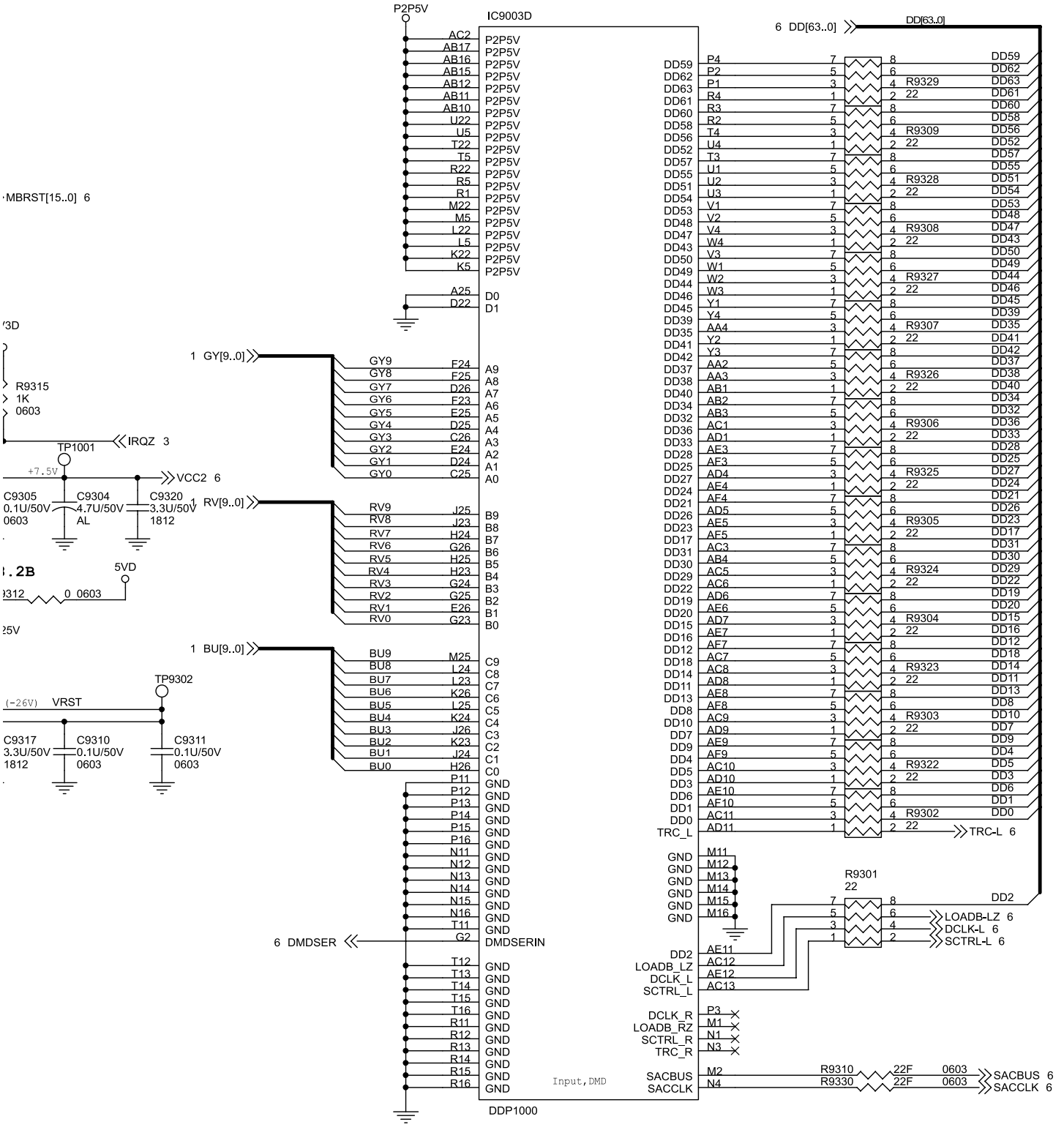
■FORMATTER UNIT / FORMATIERE REINHEIT-4/6





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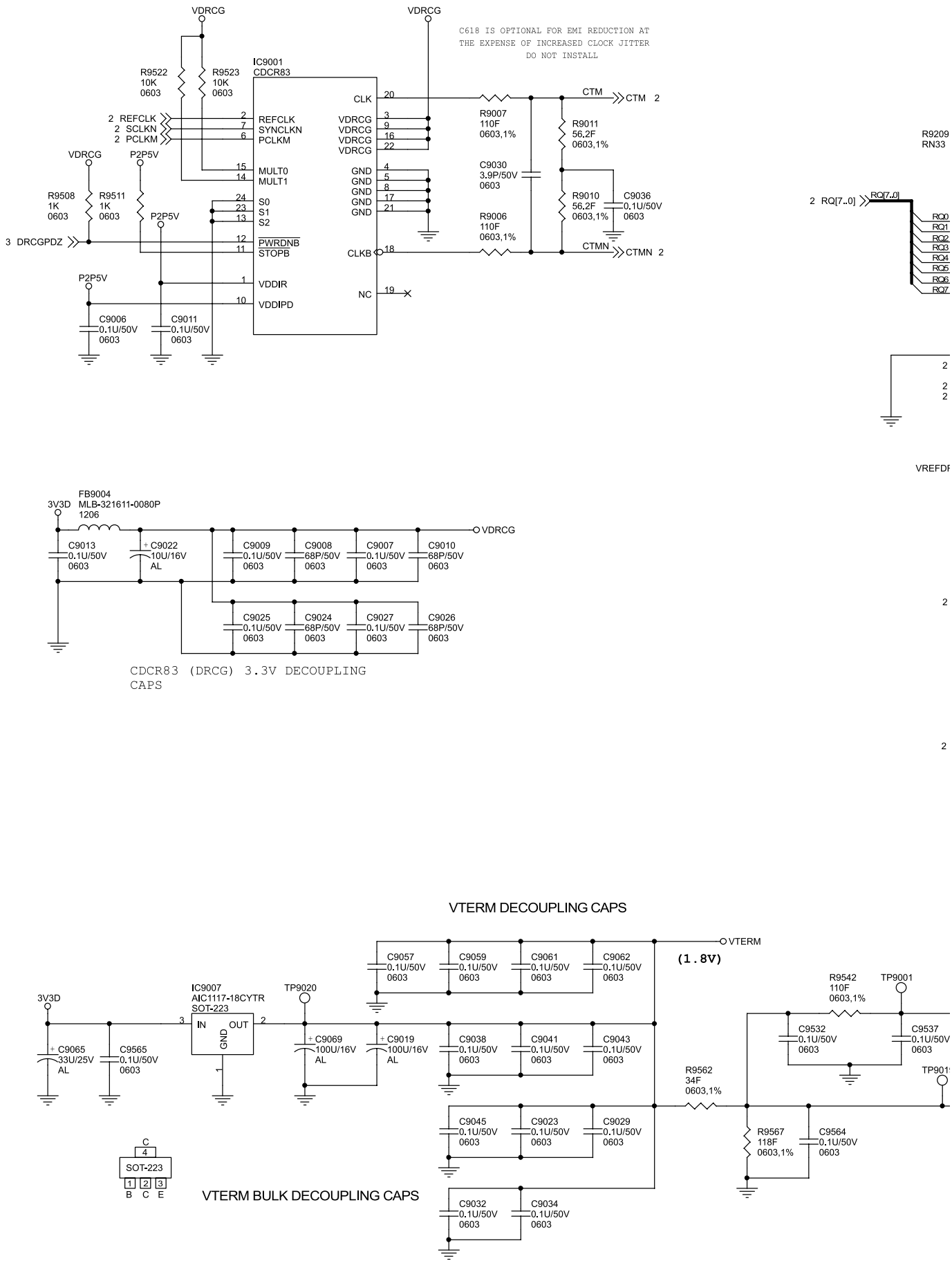

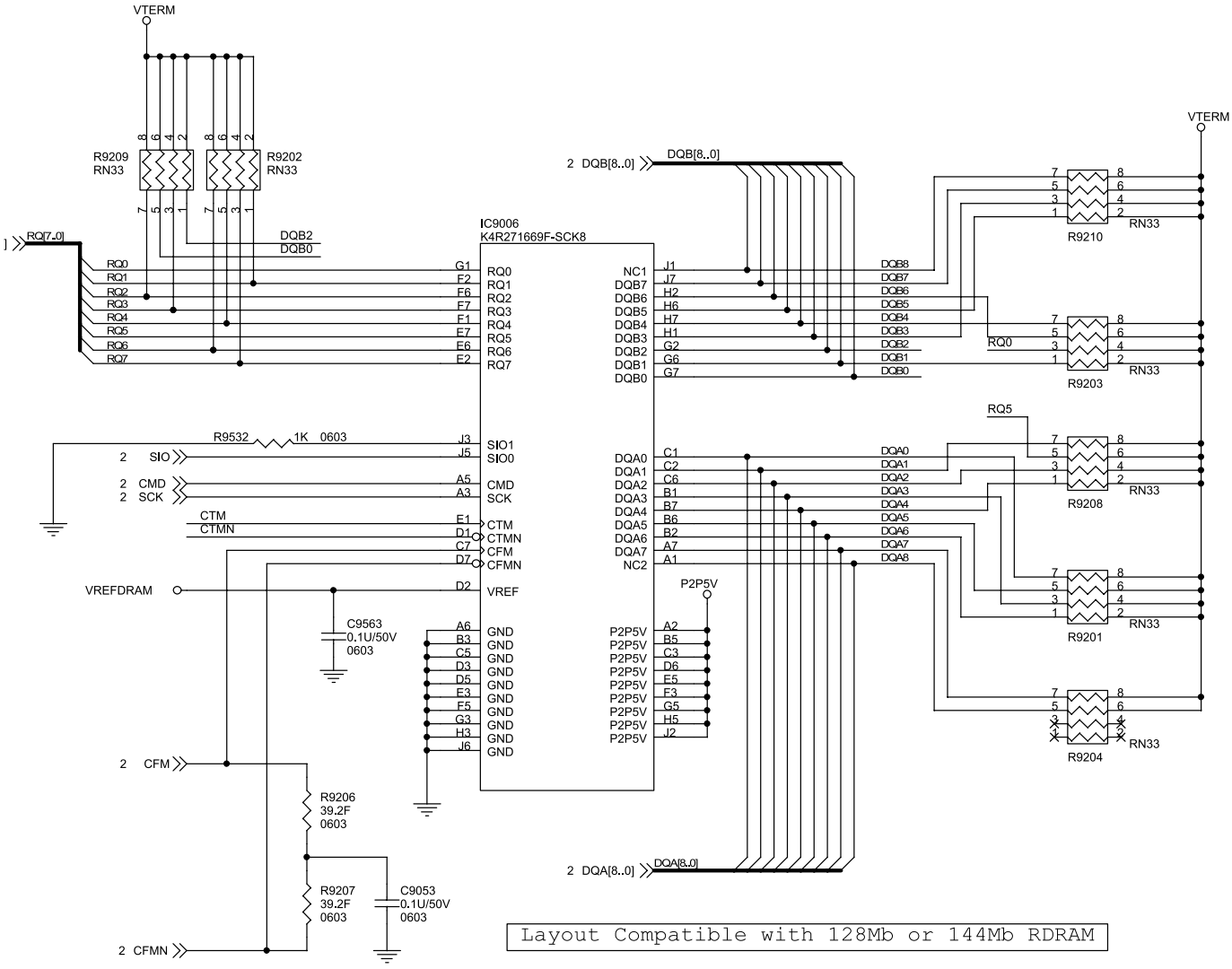

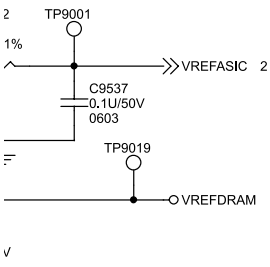

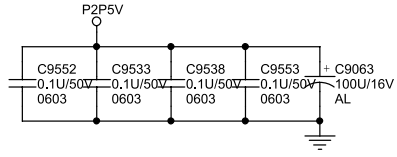

RDRAM VDD DECOUPLING CAPS

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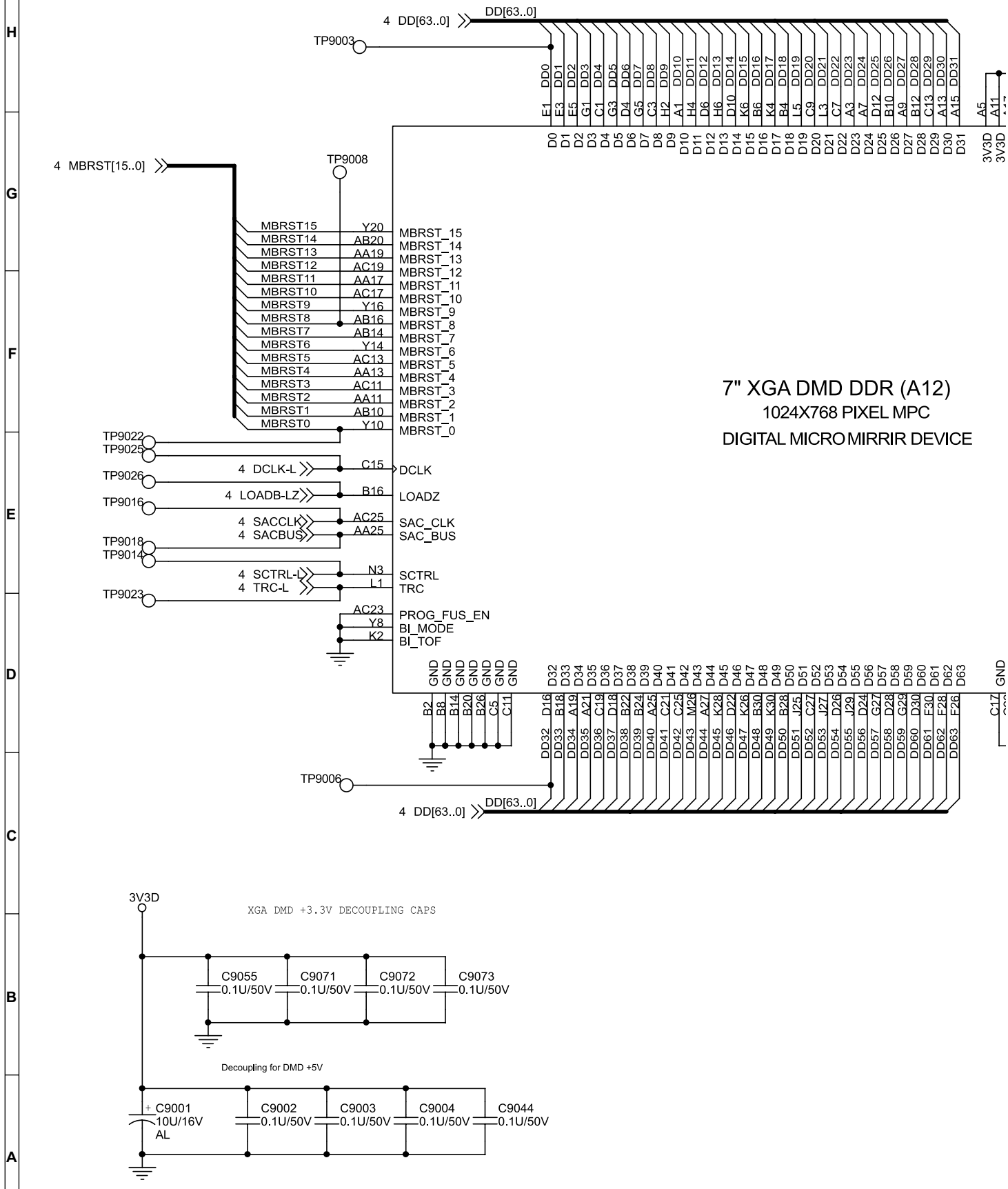
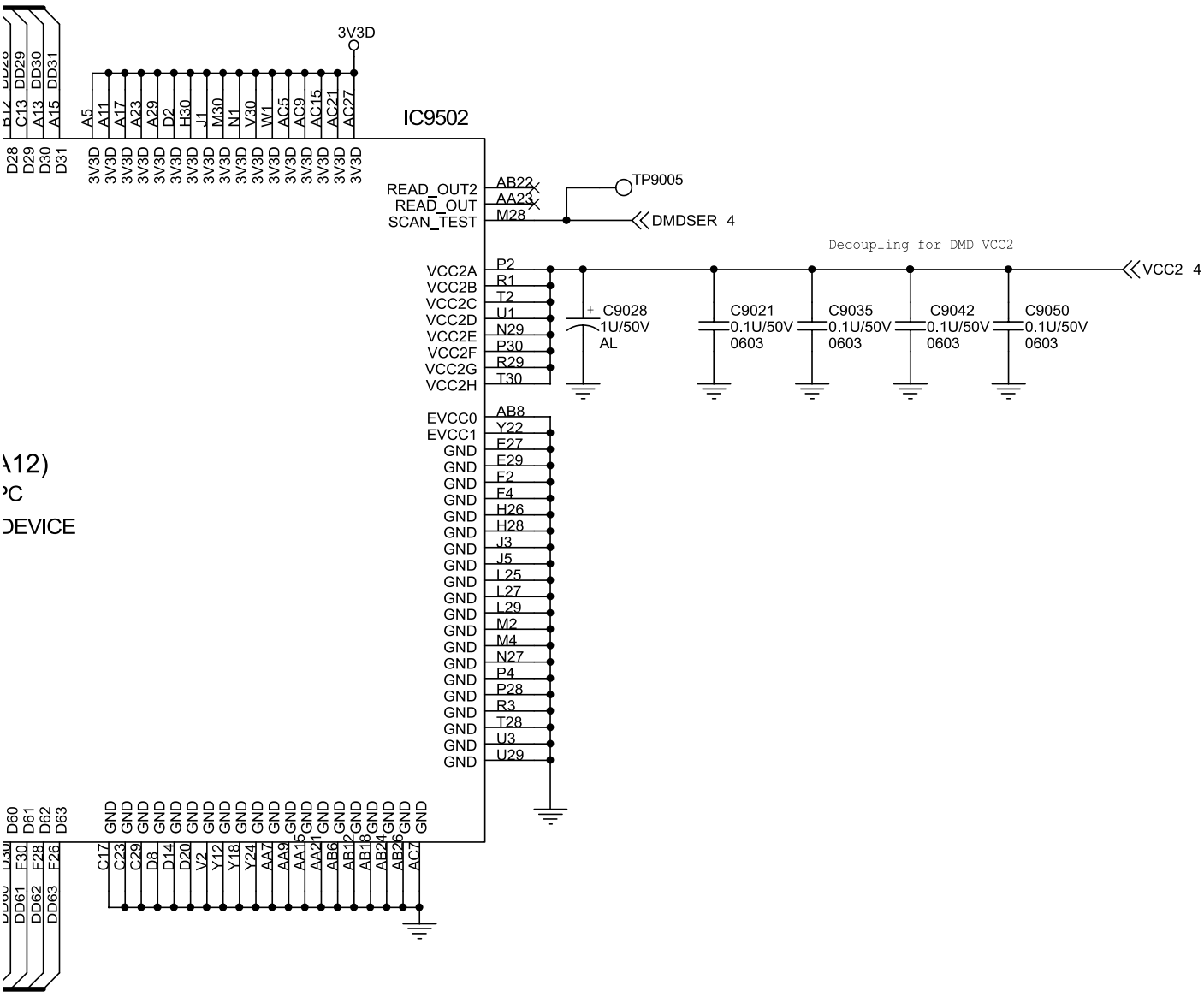
■FORMATTER UNIT / FORMATIERE REINHEIT-6/6





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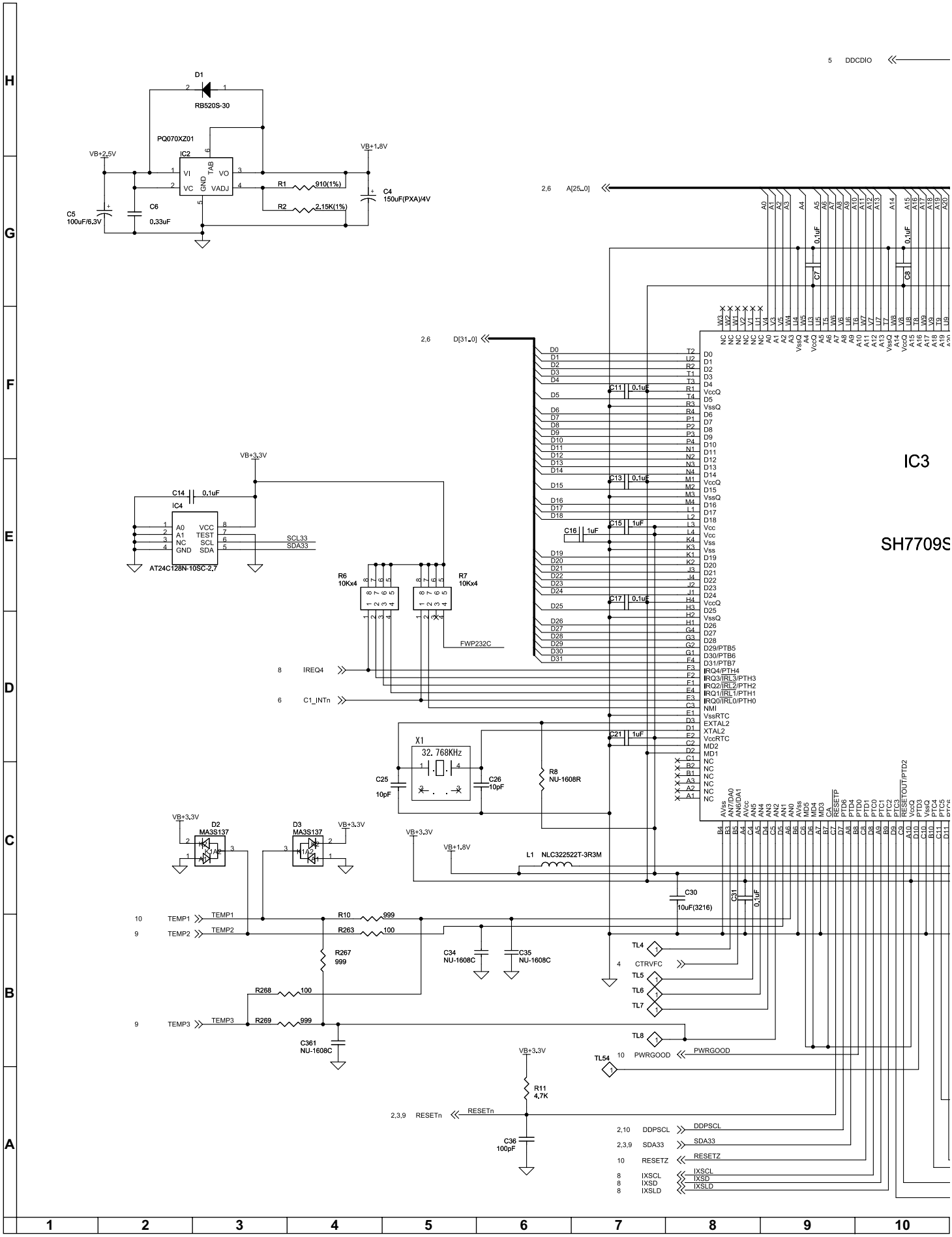
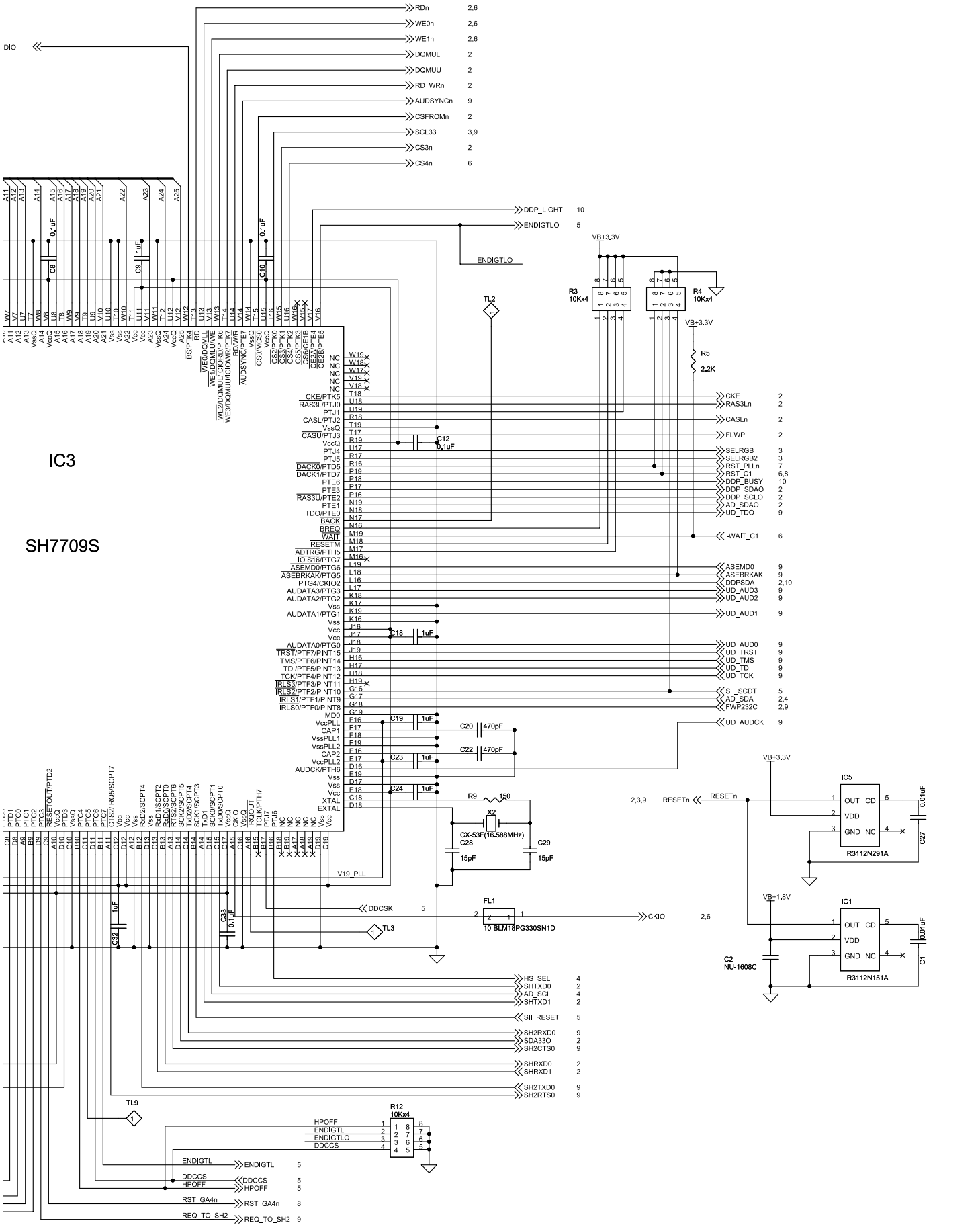
■PC I/F UNIT / PC-I/F-EINHEIT-1/10 (Ref. No. 8XXX → (IC3=IC8003))





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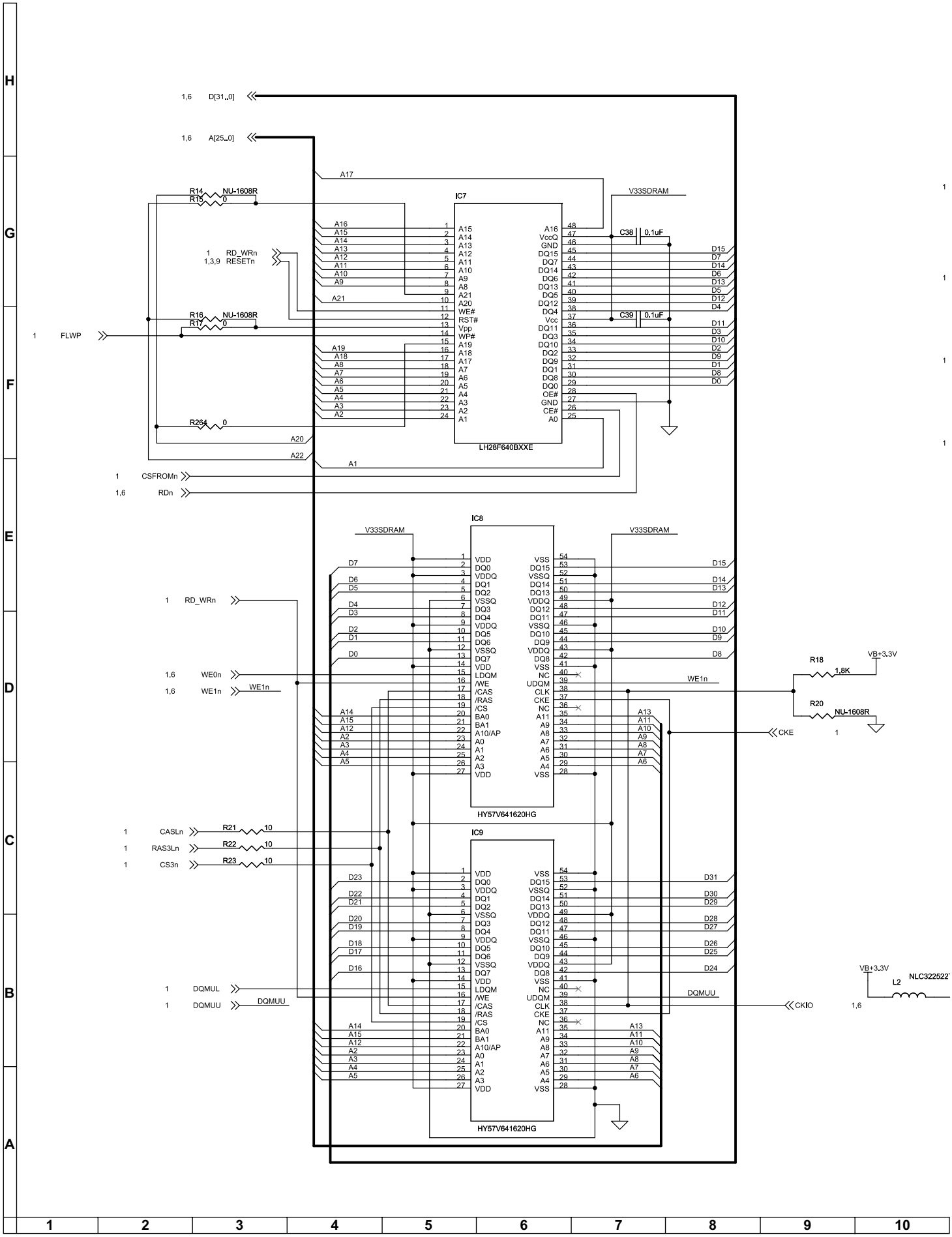

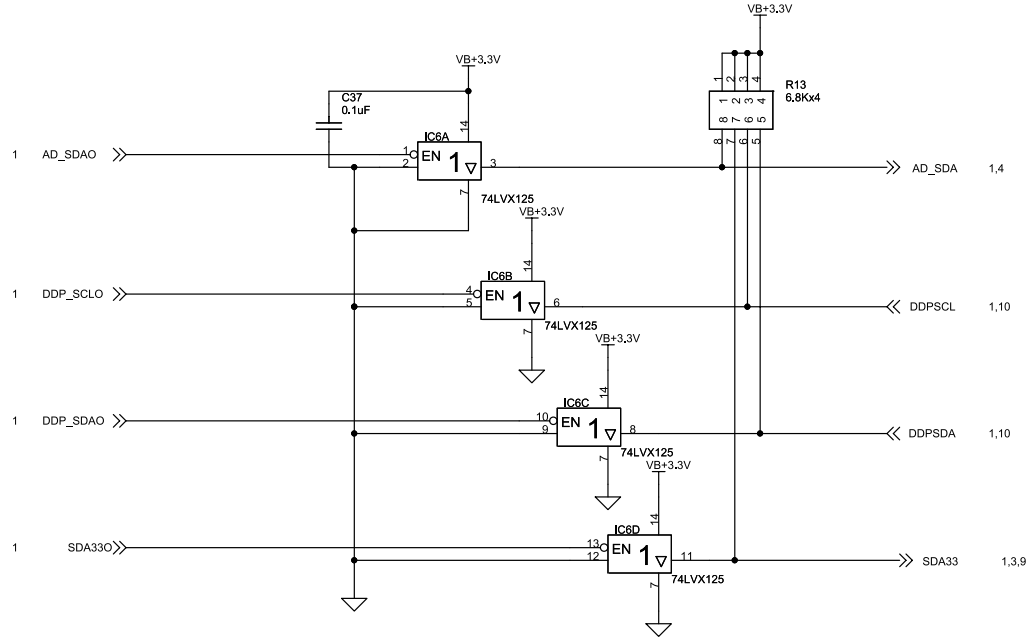

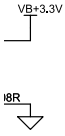

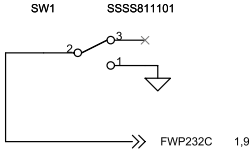

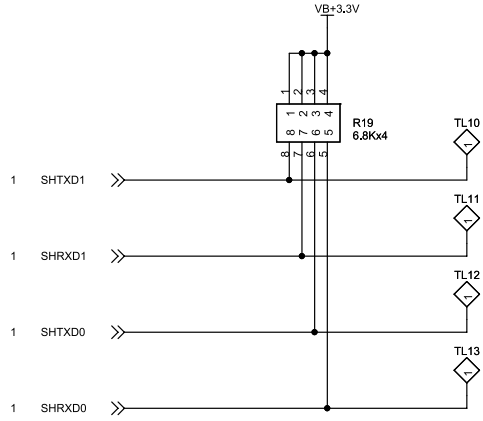

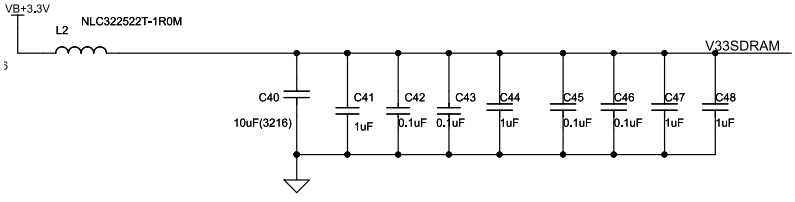

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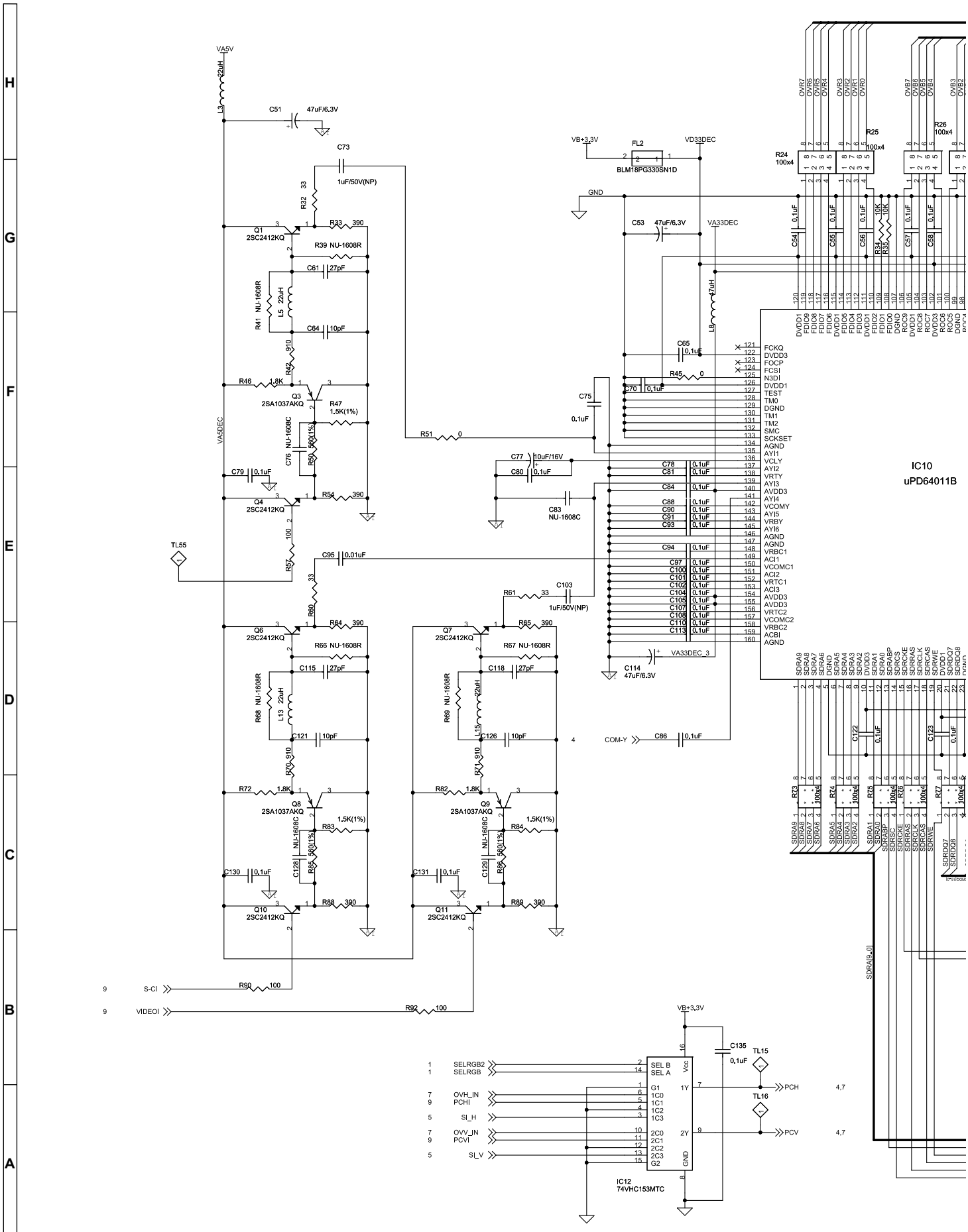

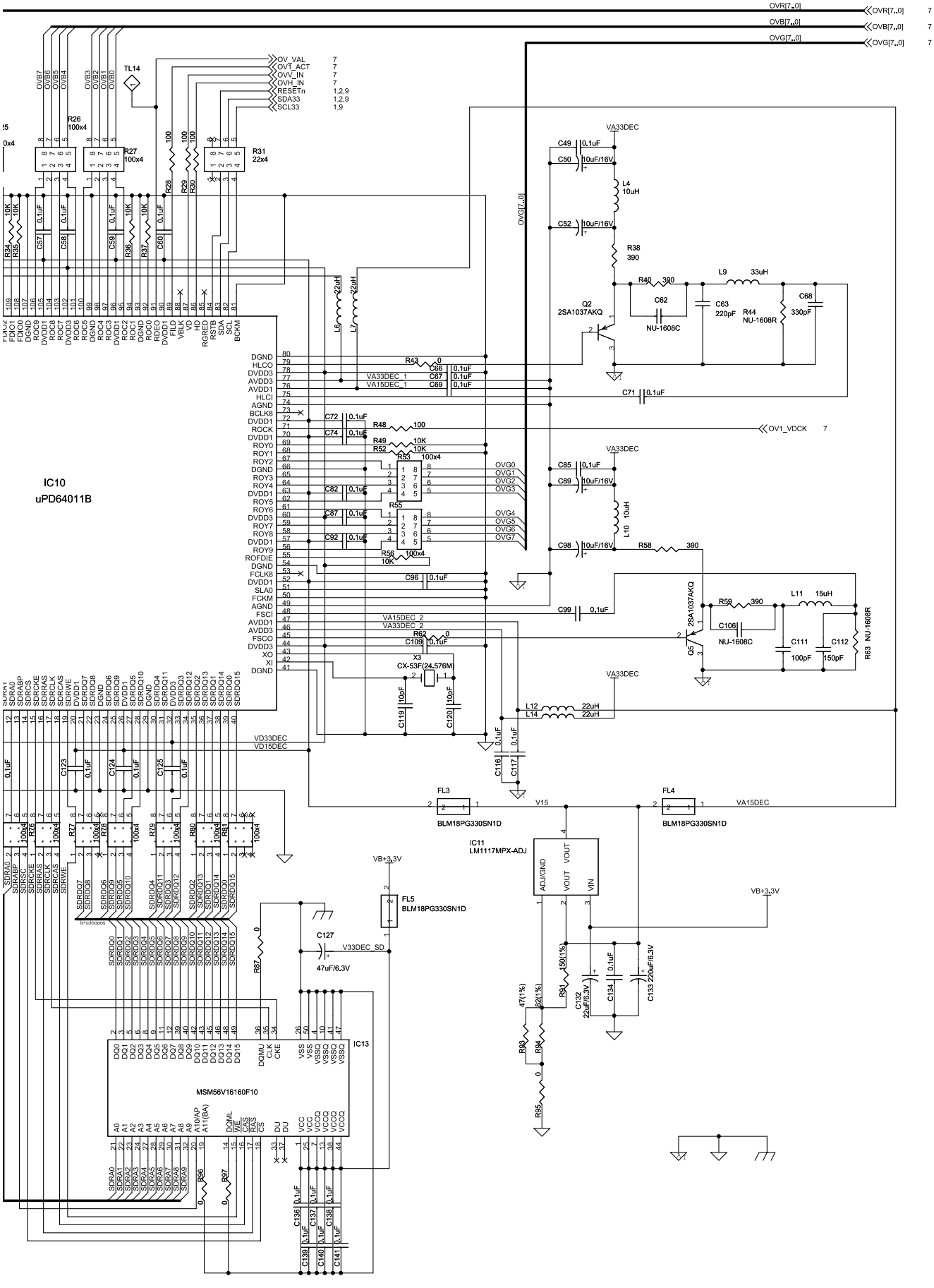

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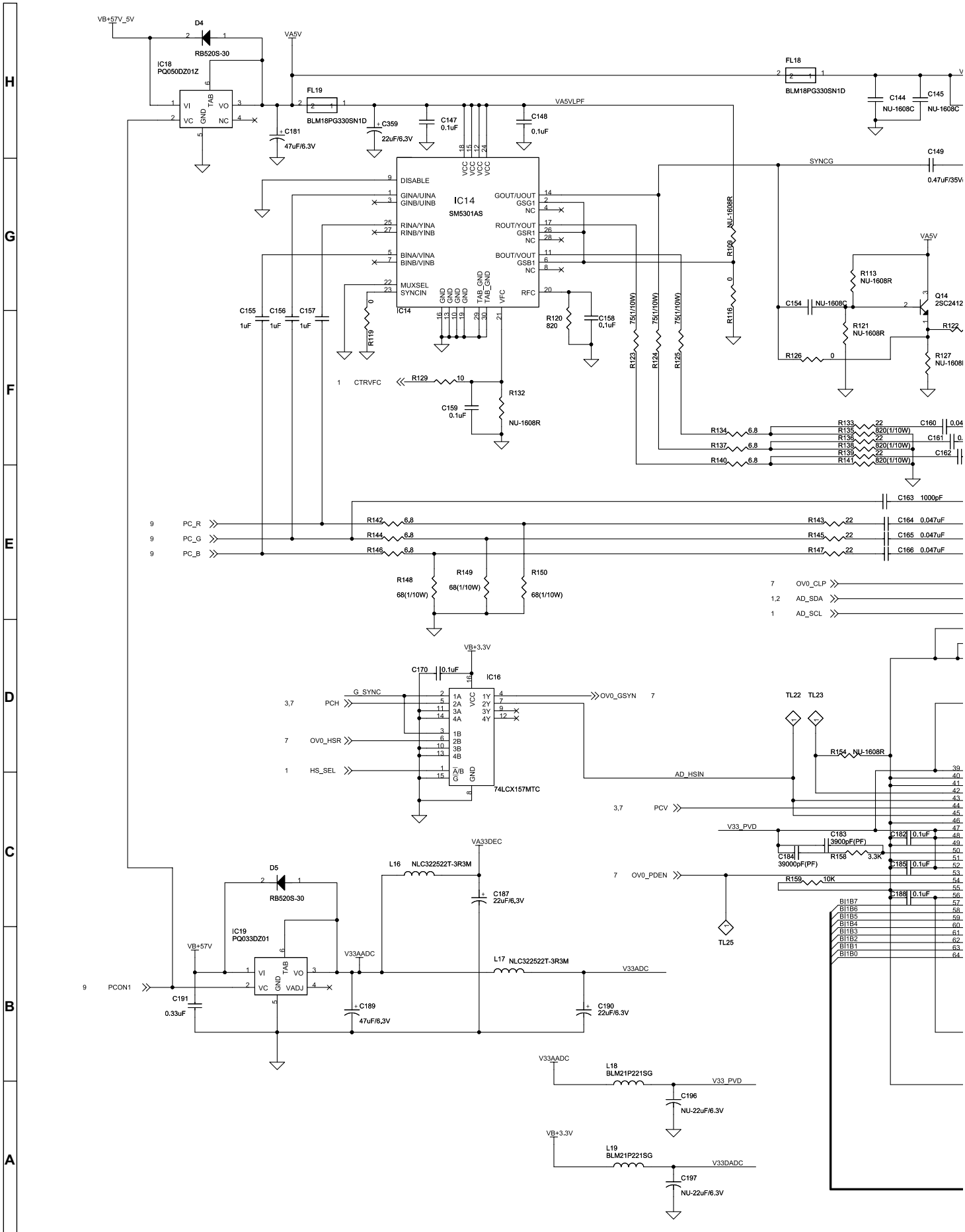
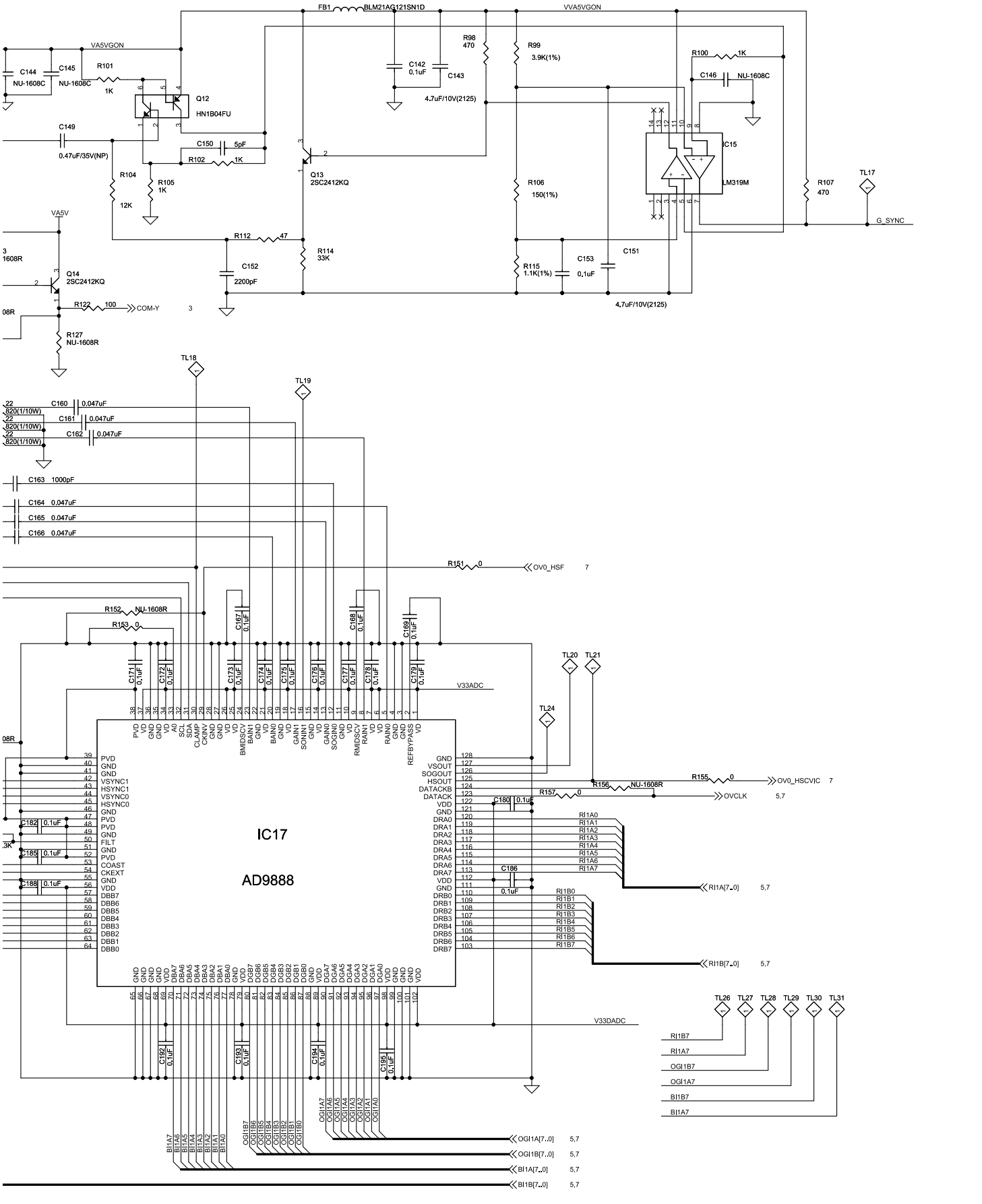
■PC I/F UNIT / PC-I/F-EINHEIT-4/10 (Ref. No. 8XXX → (IC17=IC8017))





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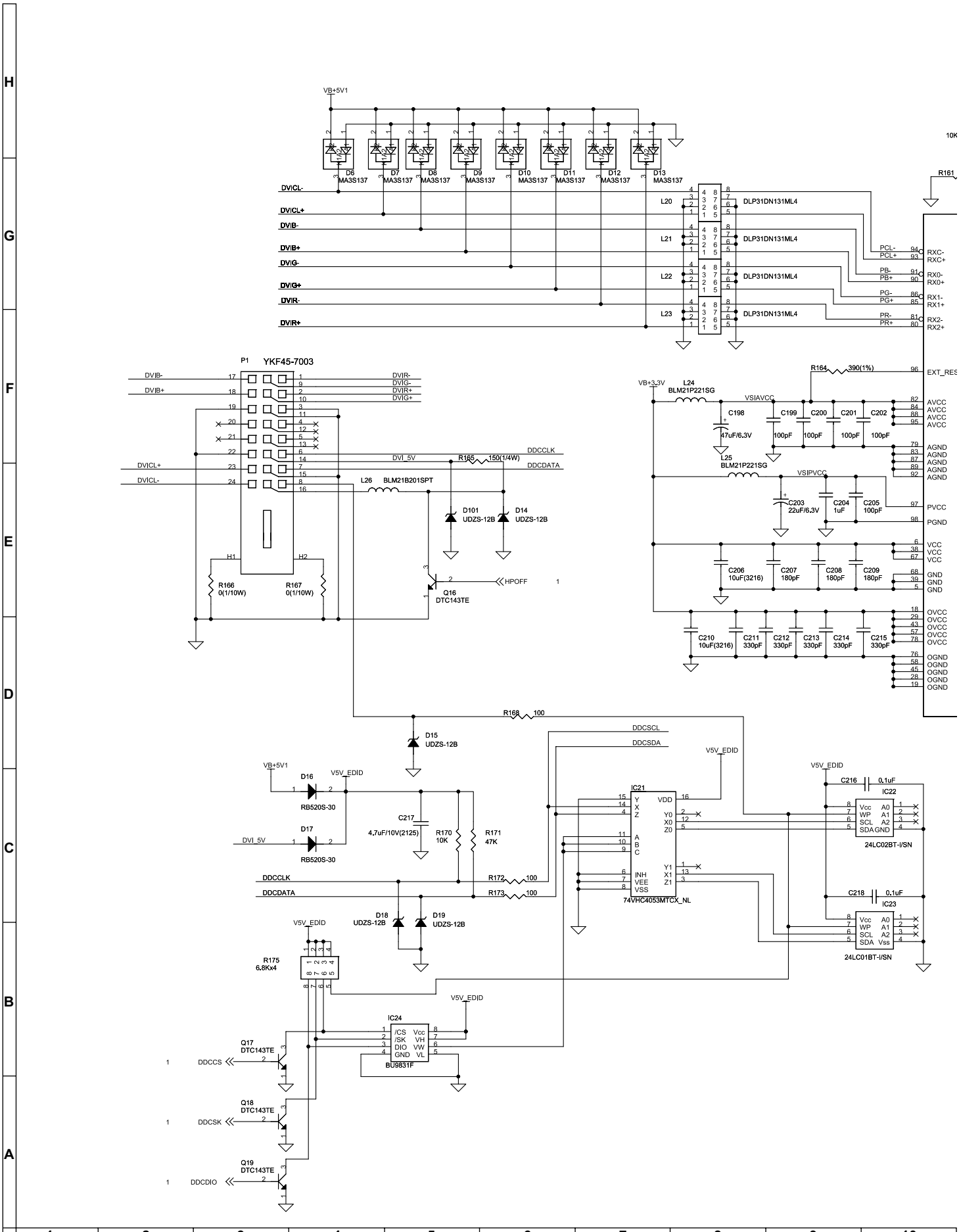

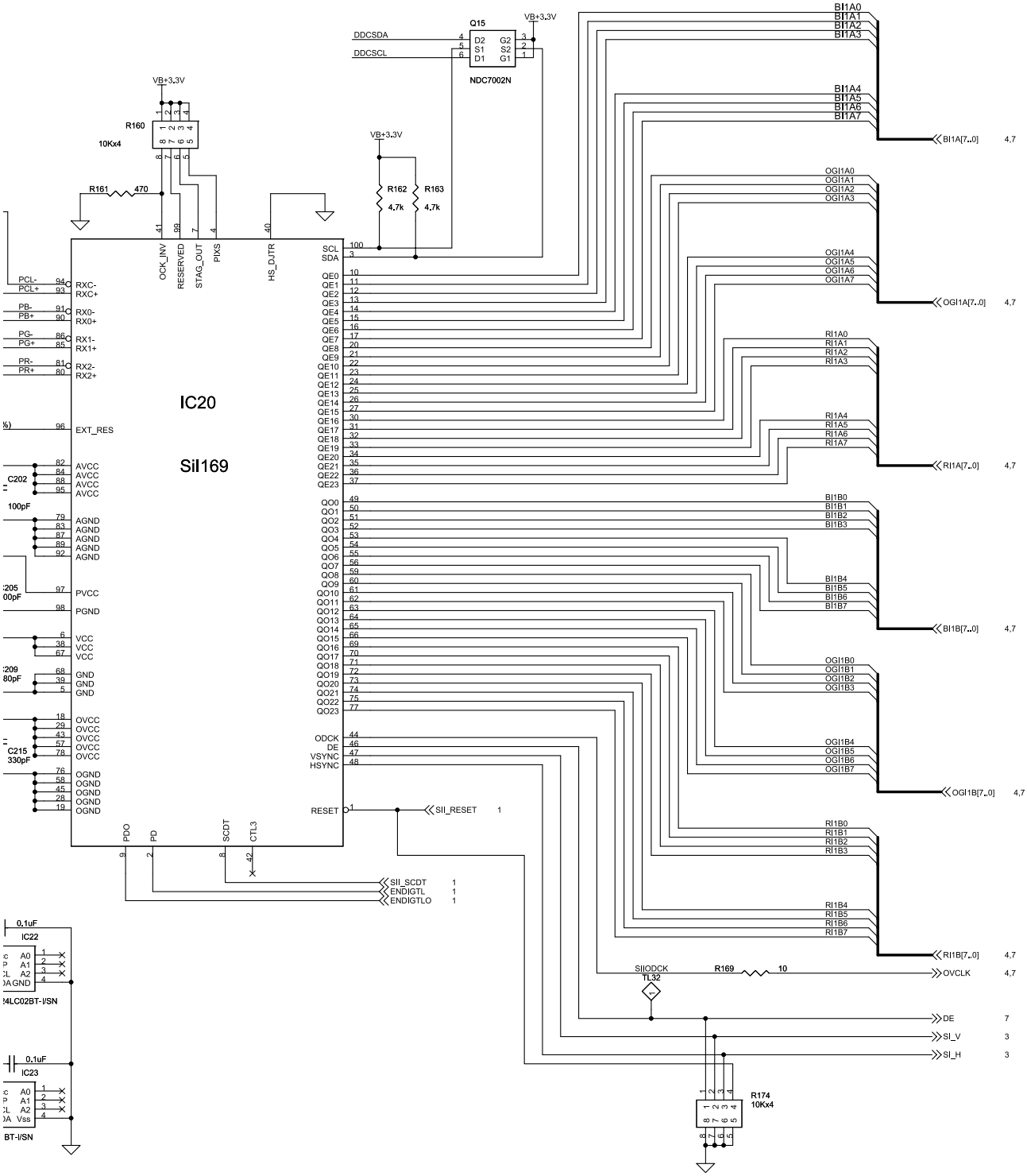

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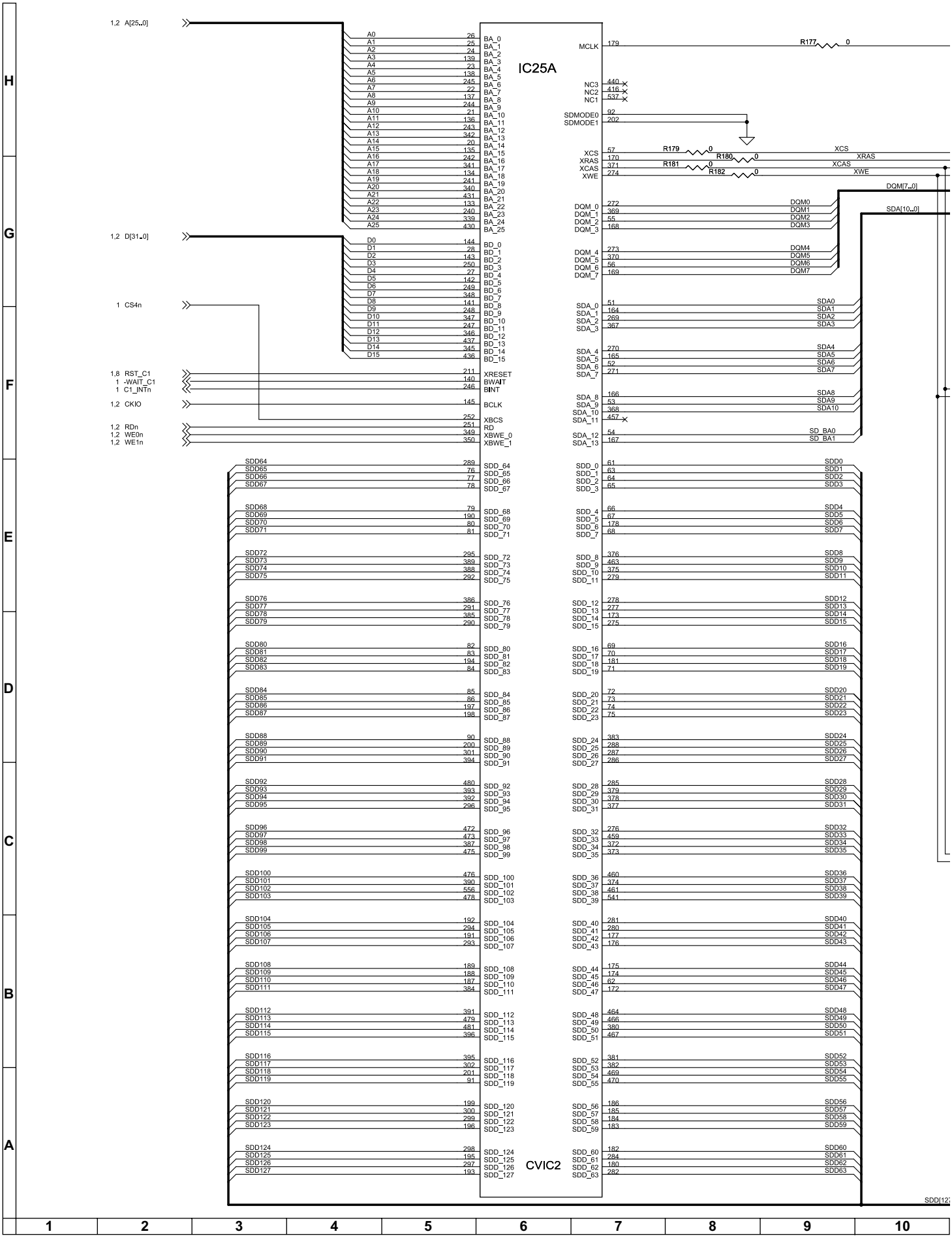
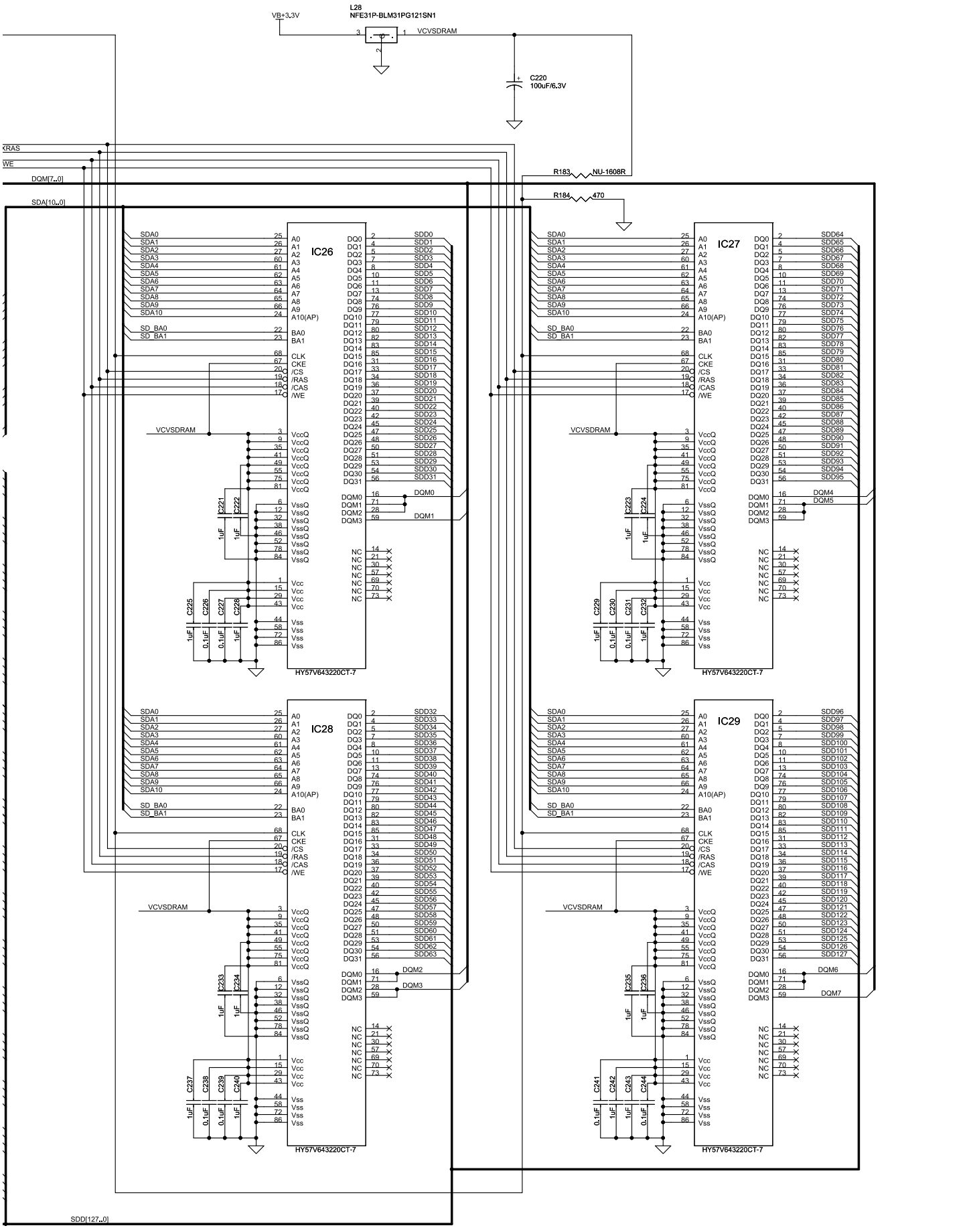
■PC I/F UNIT / PC-I/F-EINHEIT-6/10 (Ref. No. 8XXX → (IC25A=IC8025A))





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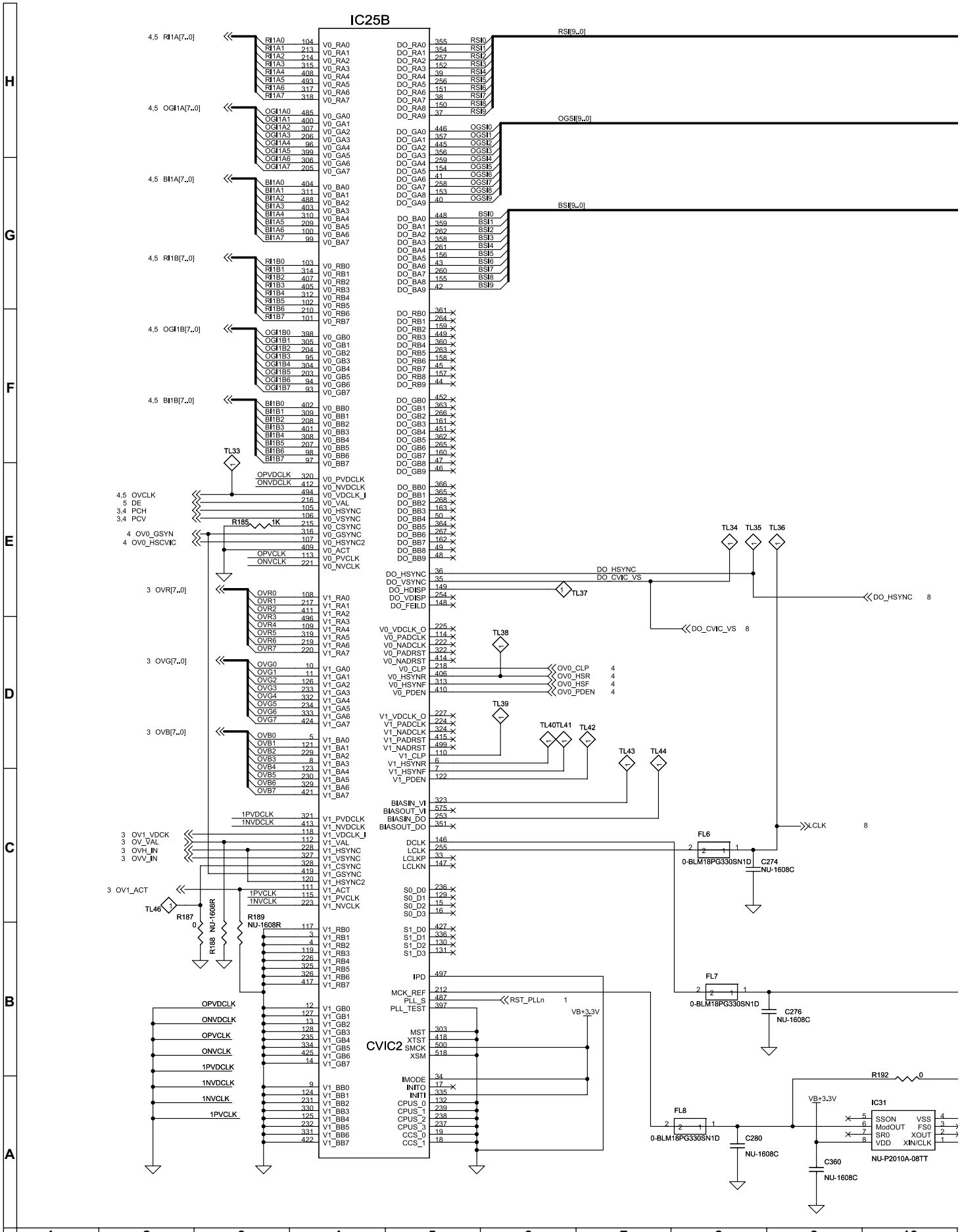

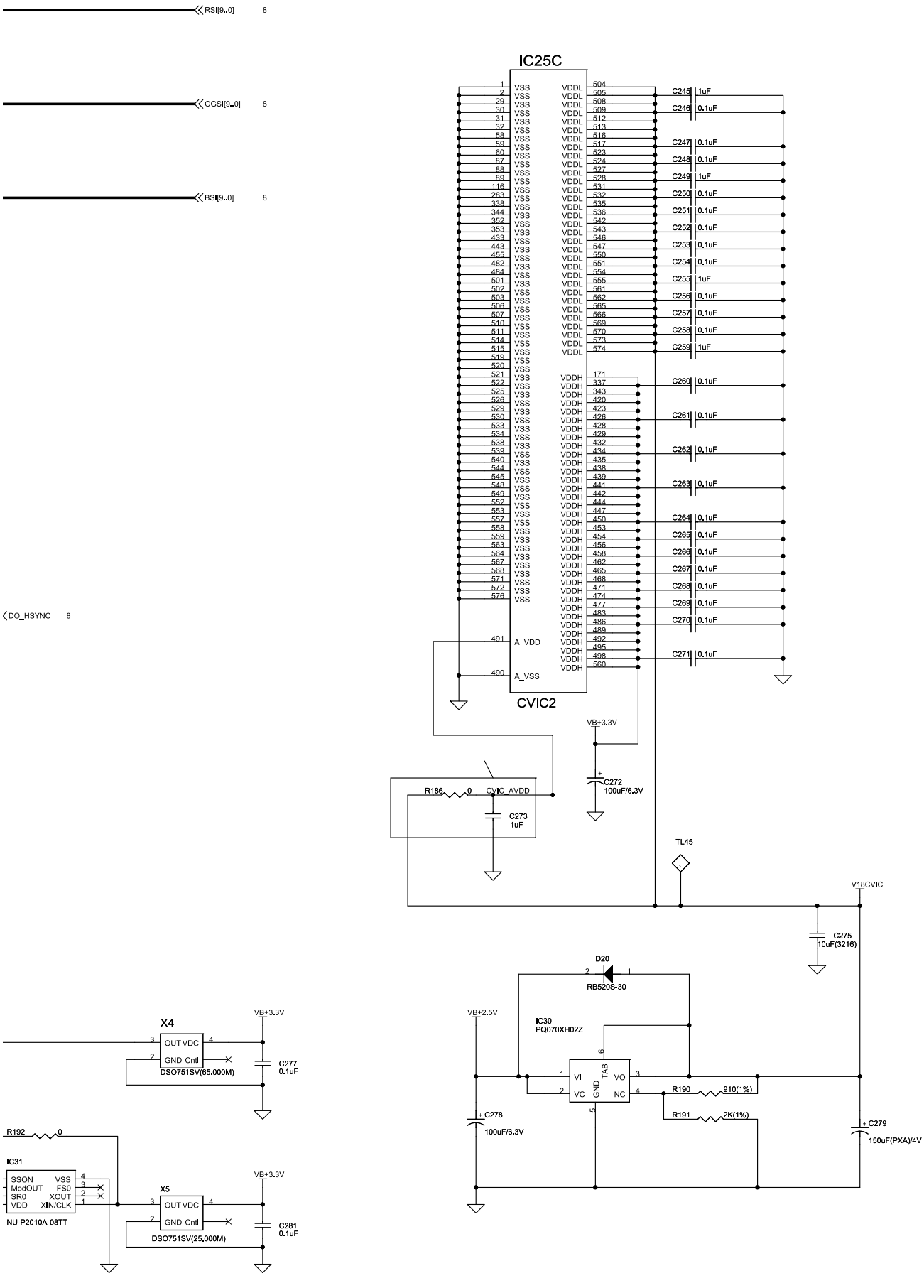

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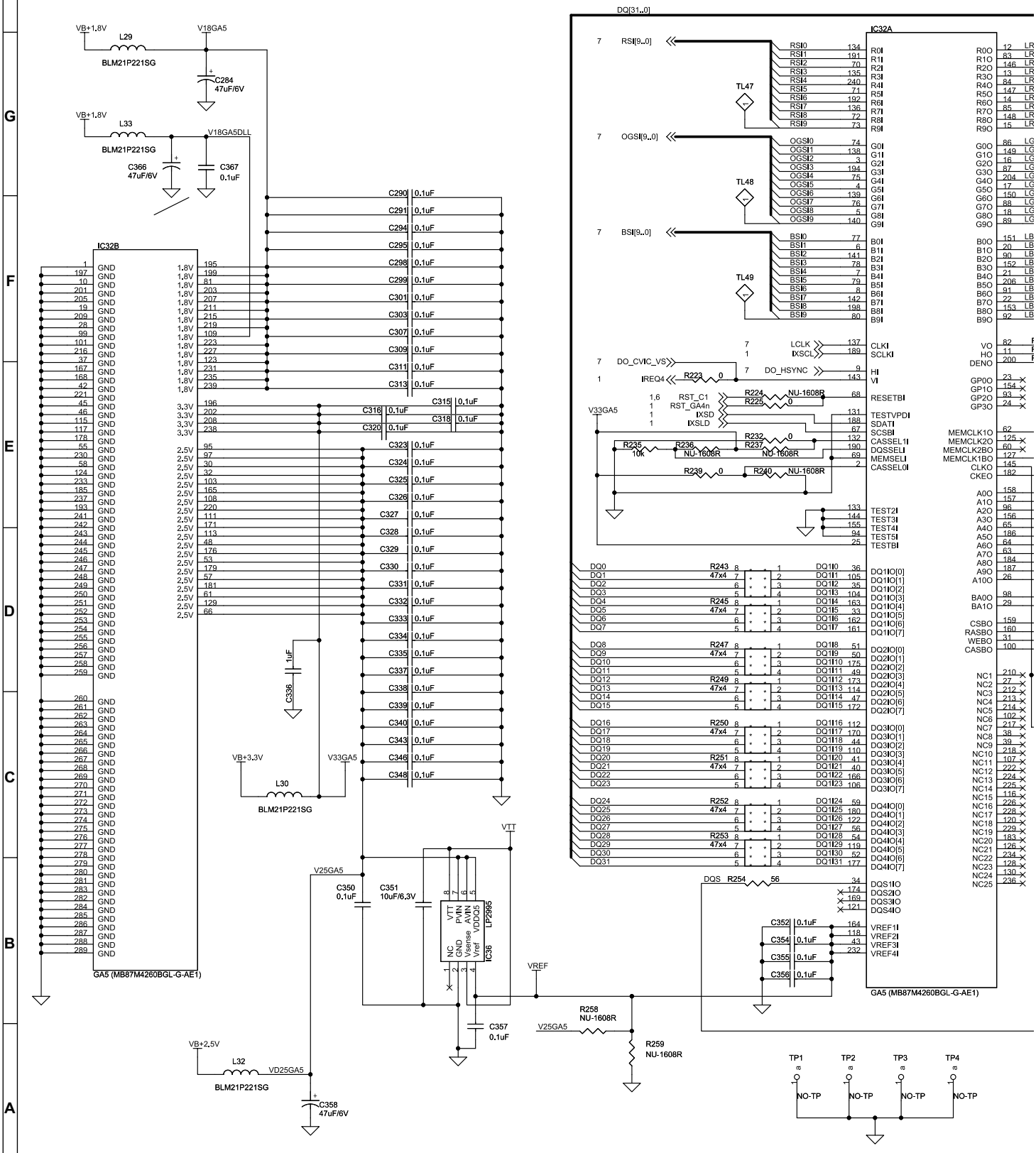

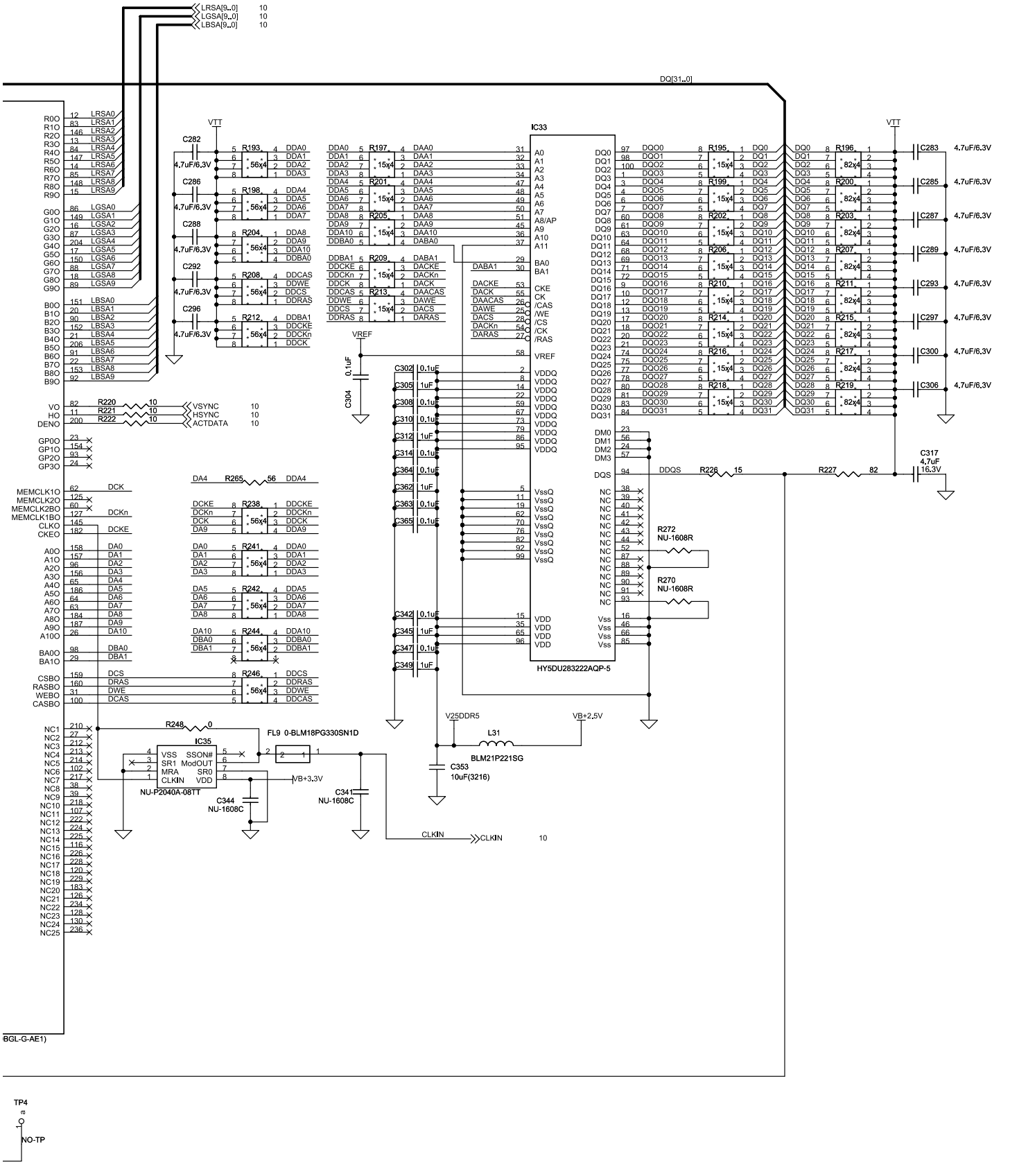

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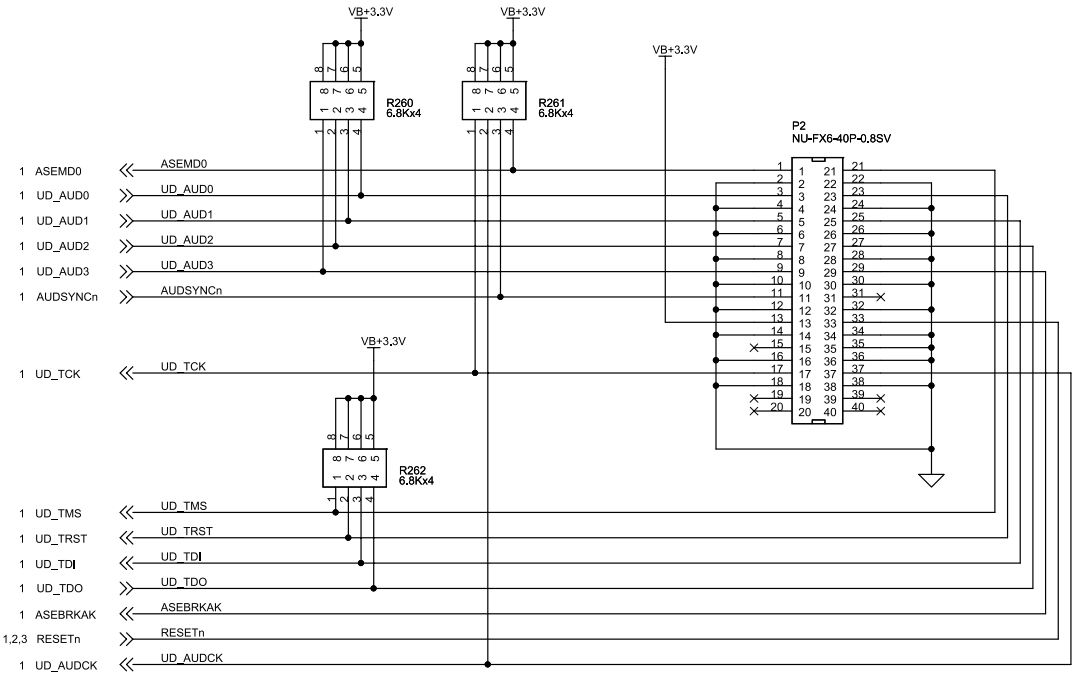
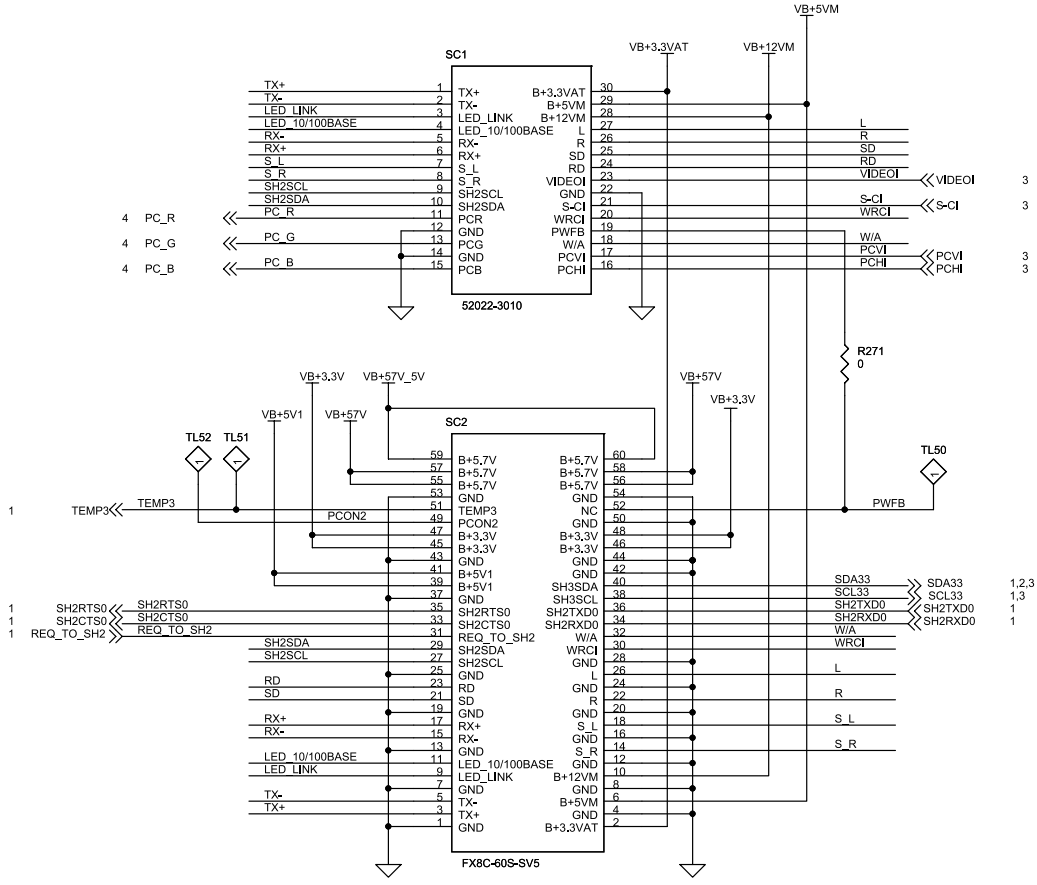
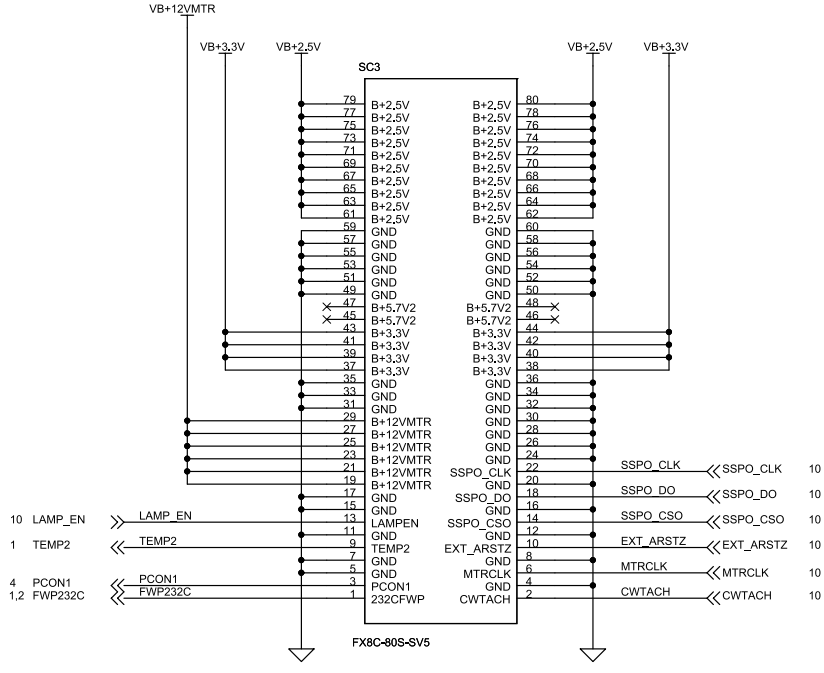
■PC I/F UNIT / PC-I/F-EINHEIT-9/10 (Ref. No. 8XXX → (R260=R8260))







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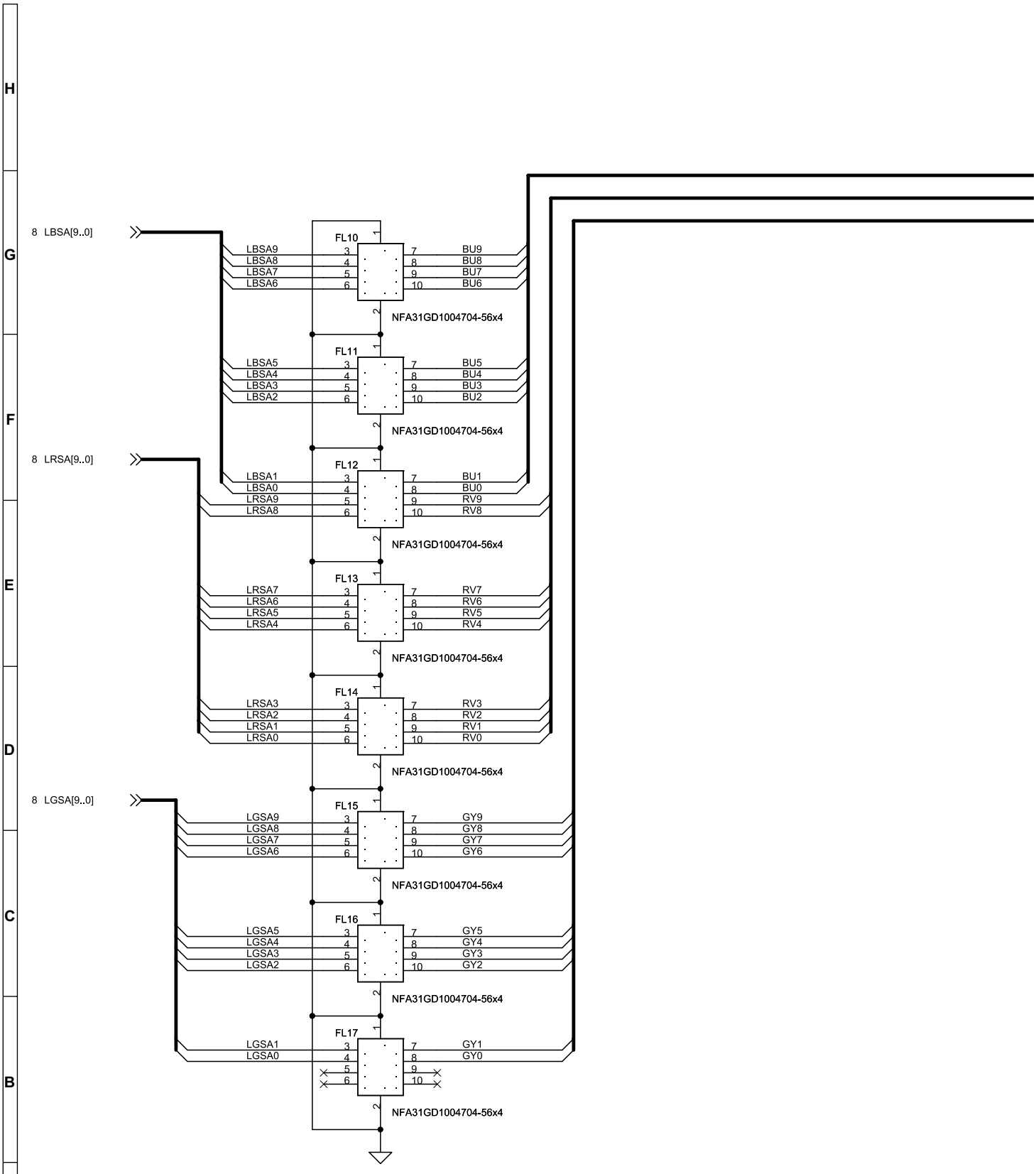

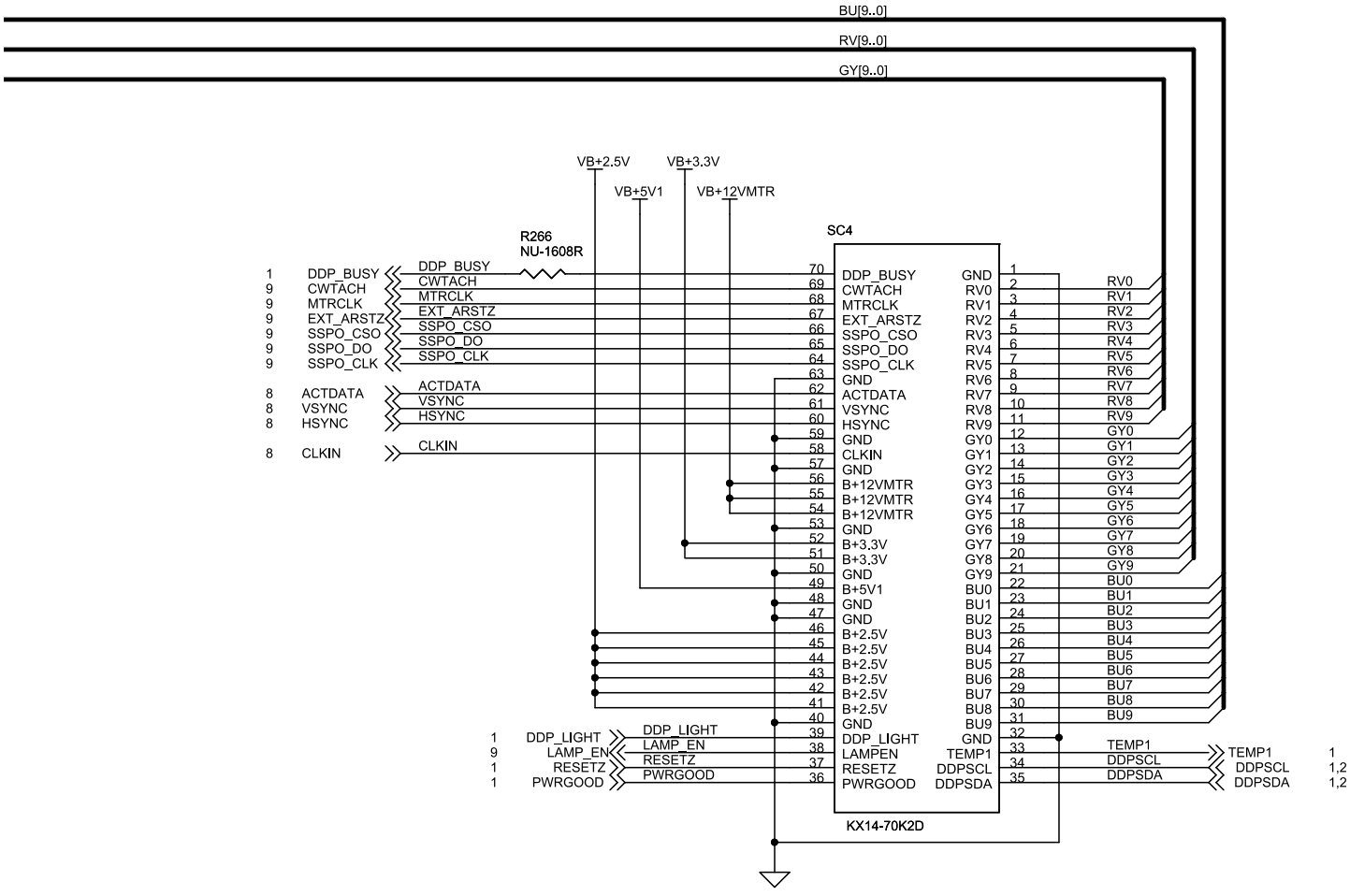

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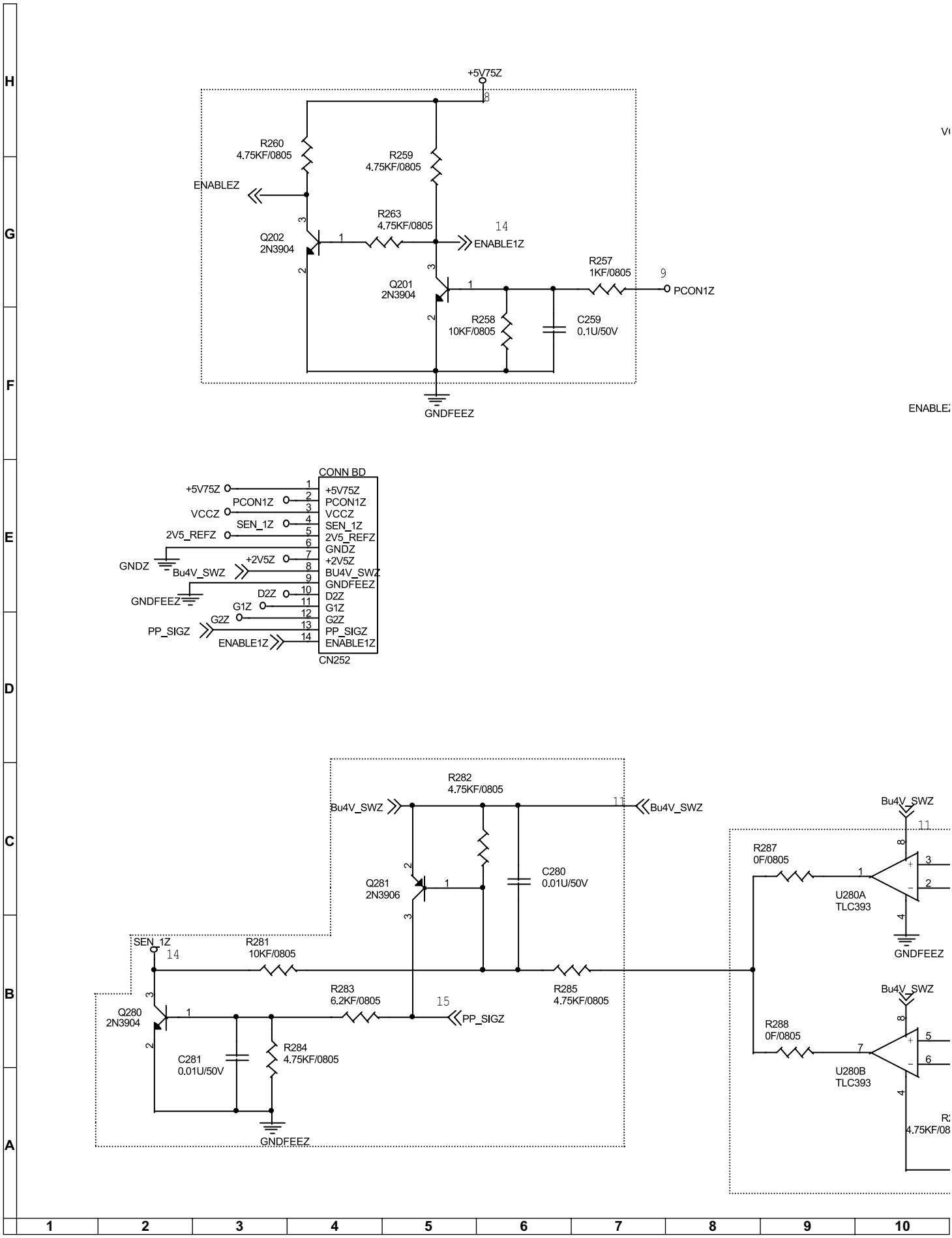
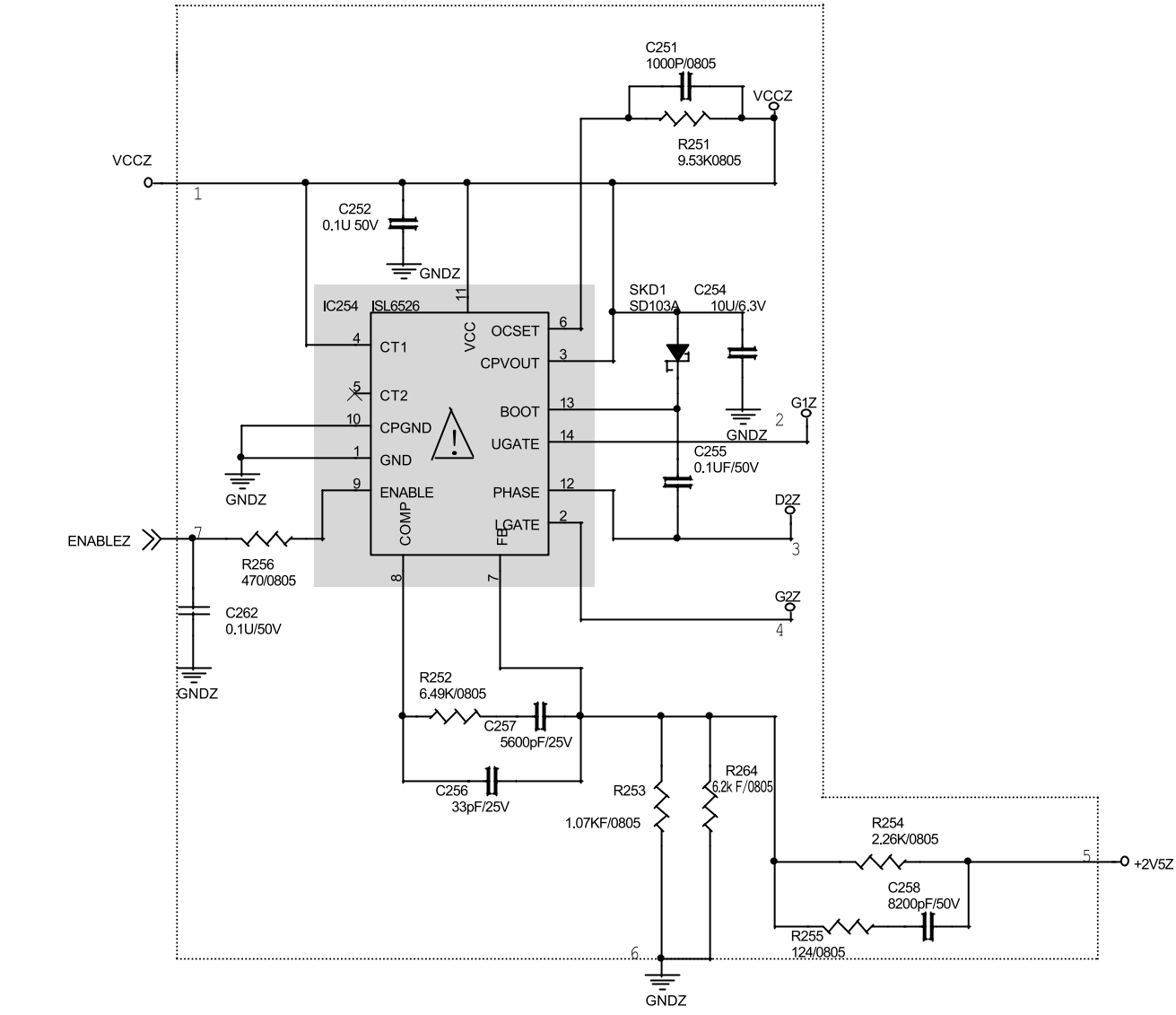
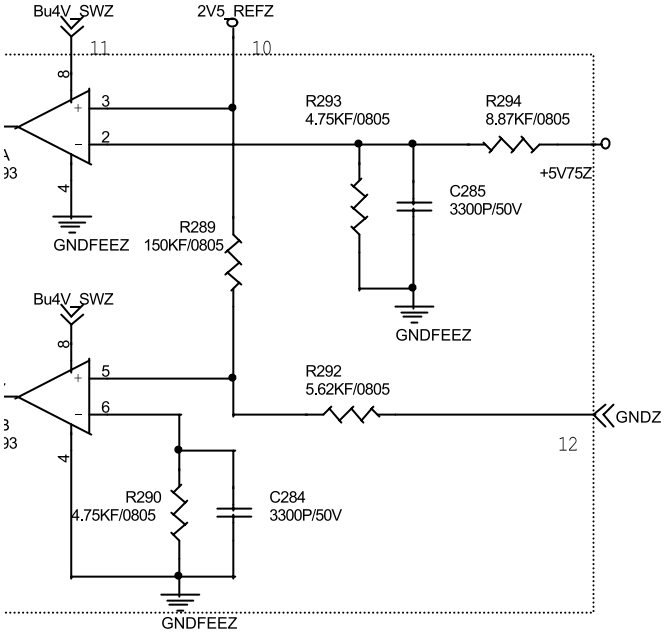
■LVPS CONTROL UNIT / LVPS-STEUEREINHEIT







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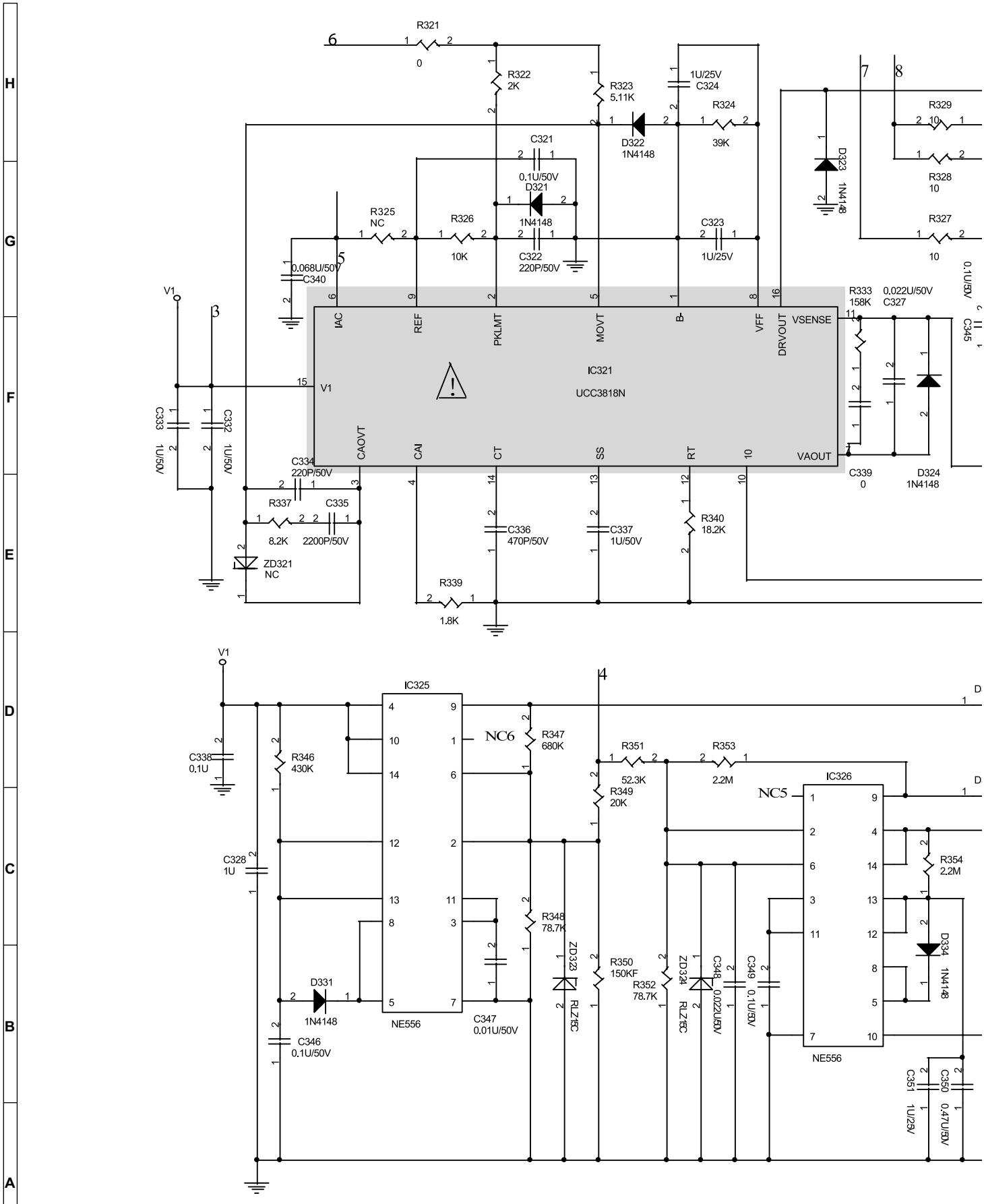
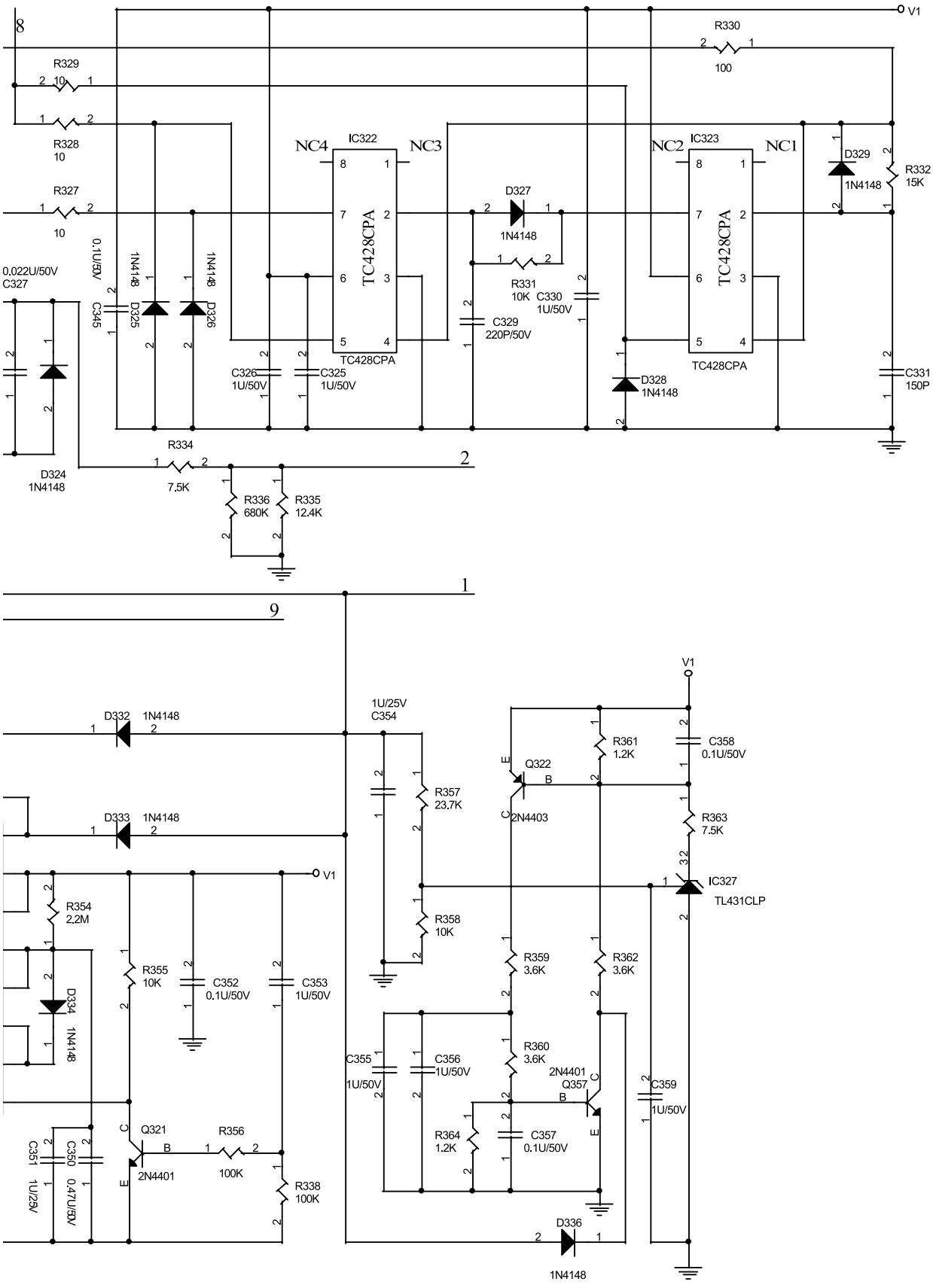
■PFC CONTROL UNIT / PFC-STEUEREINHEIT



*:OPTION



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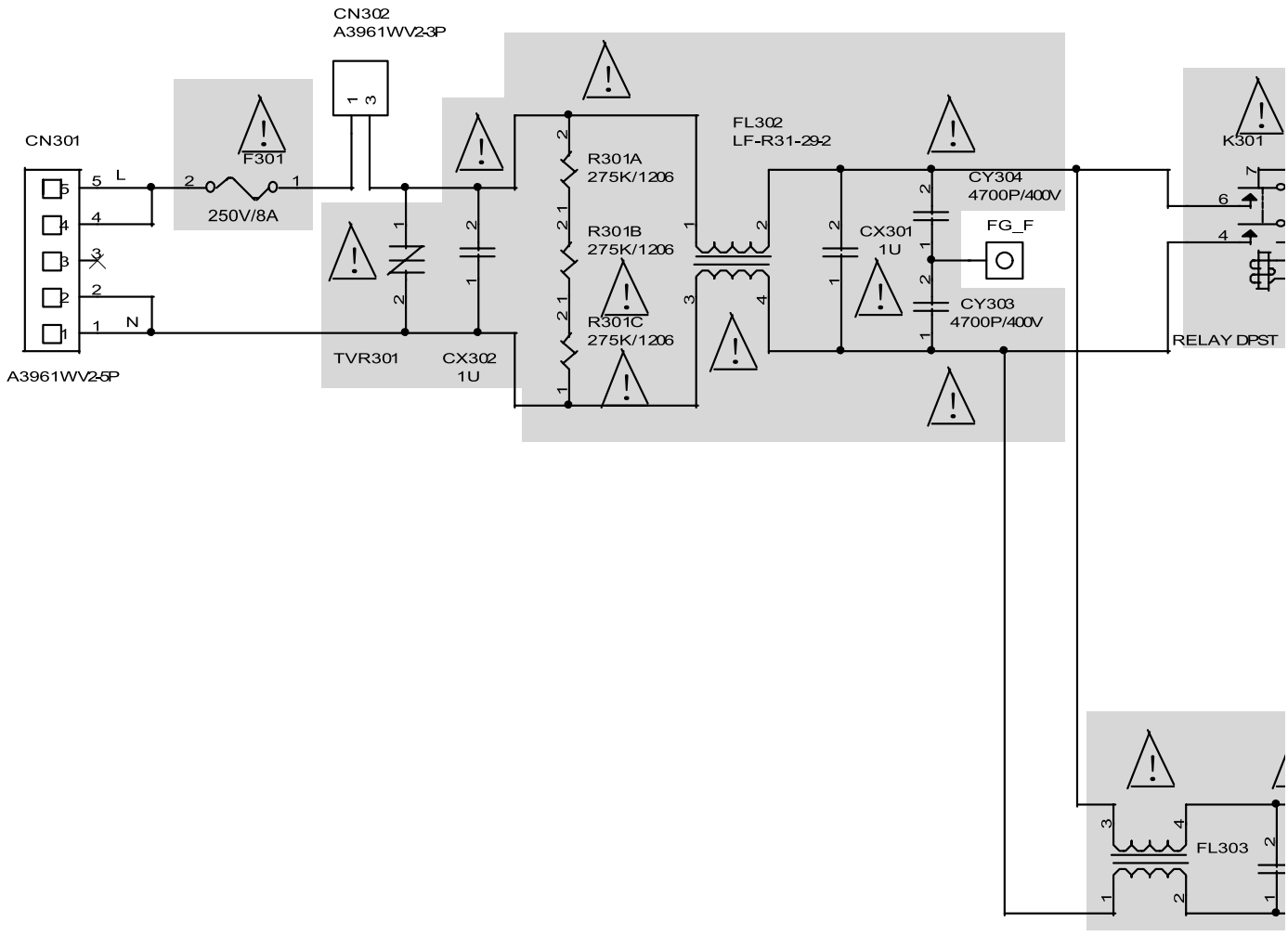
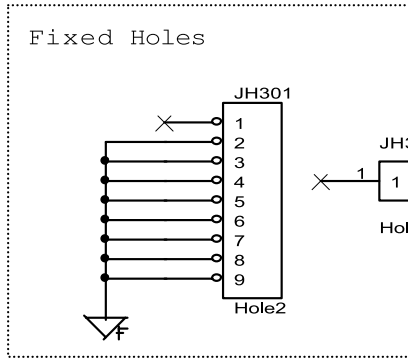
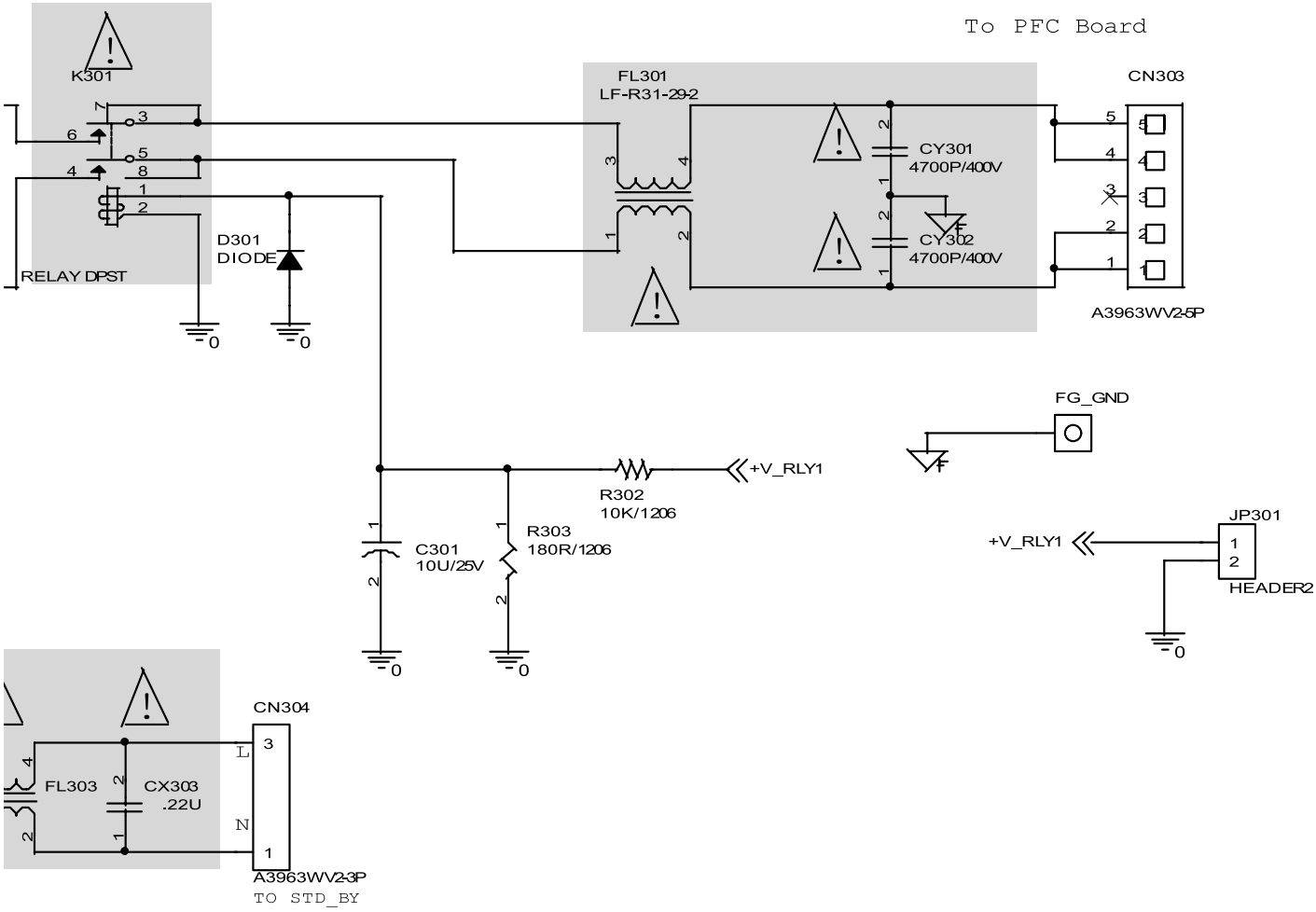
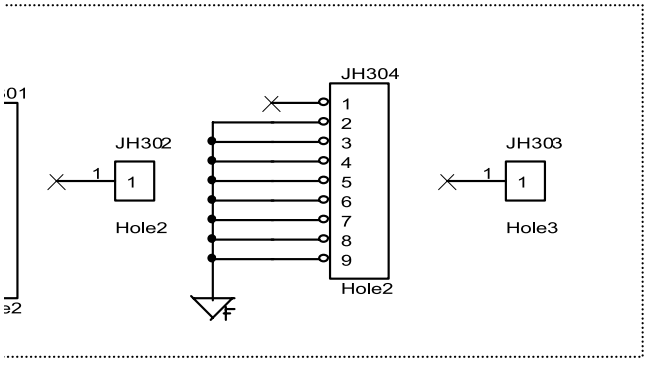
■FILTER UNIT / FILTEREINHEIT









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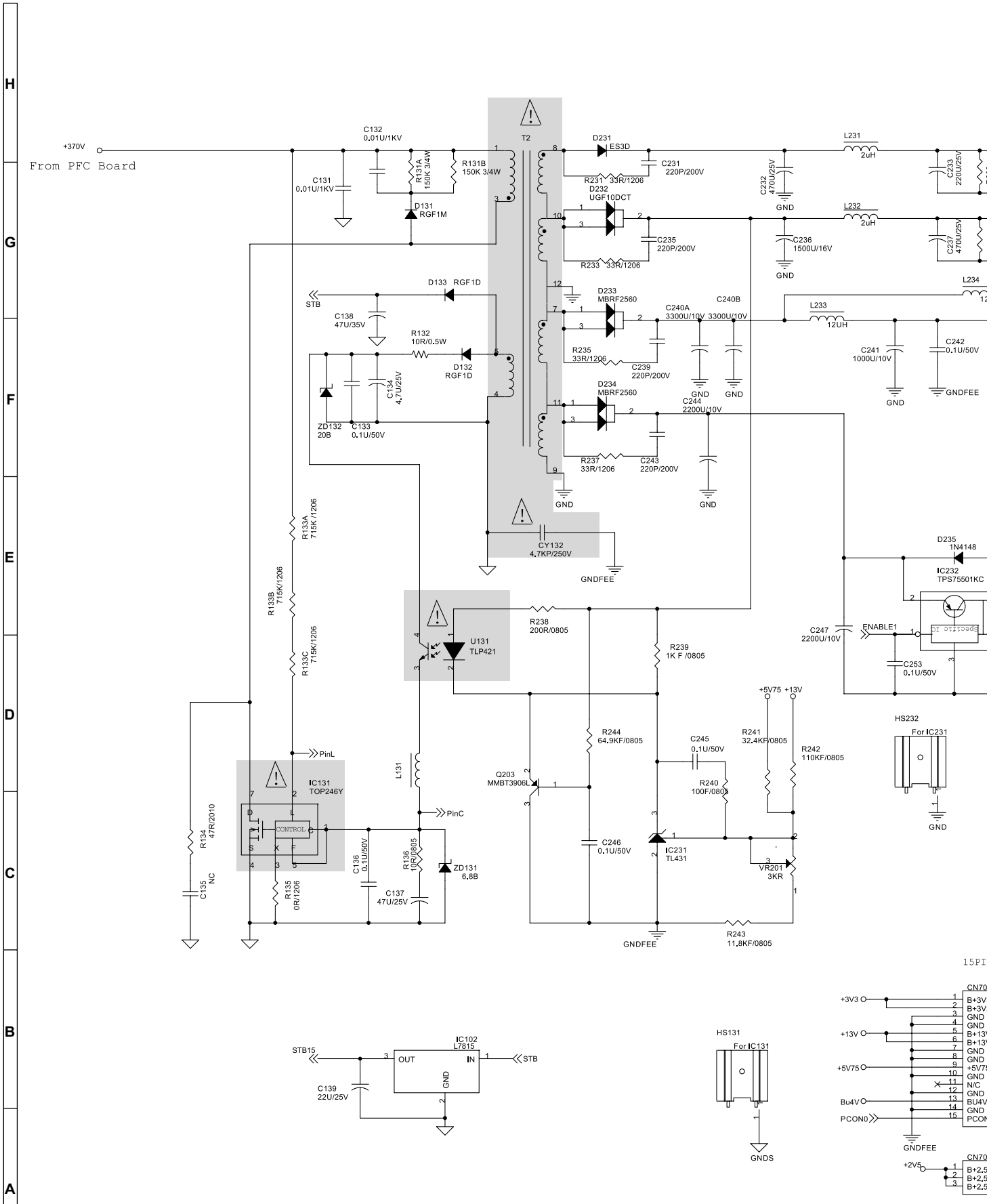
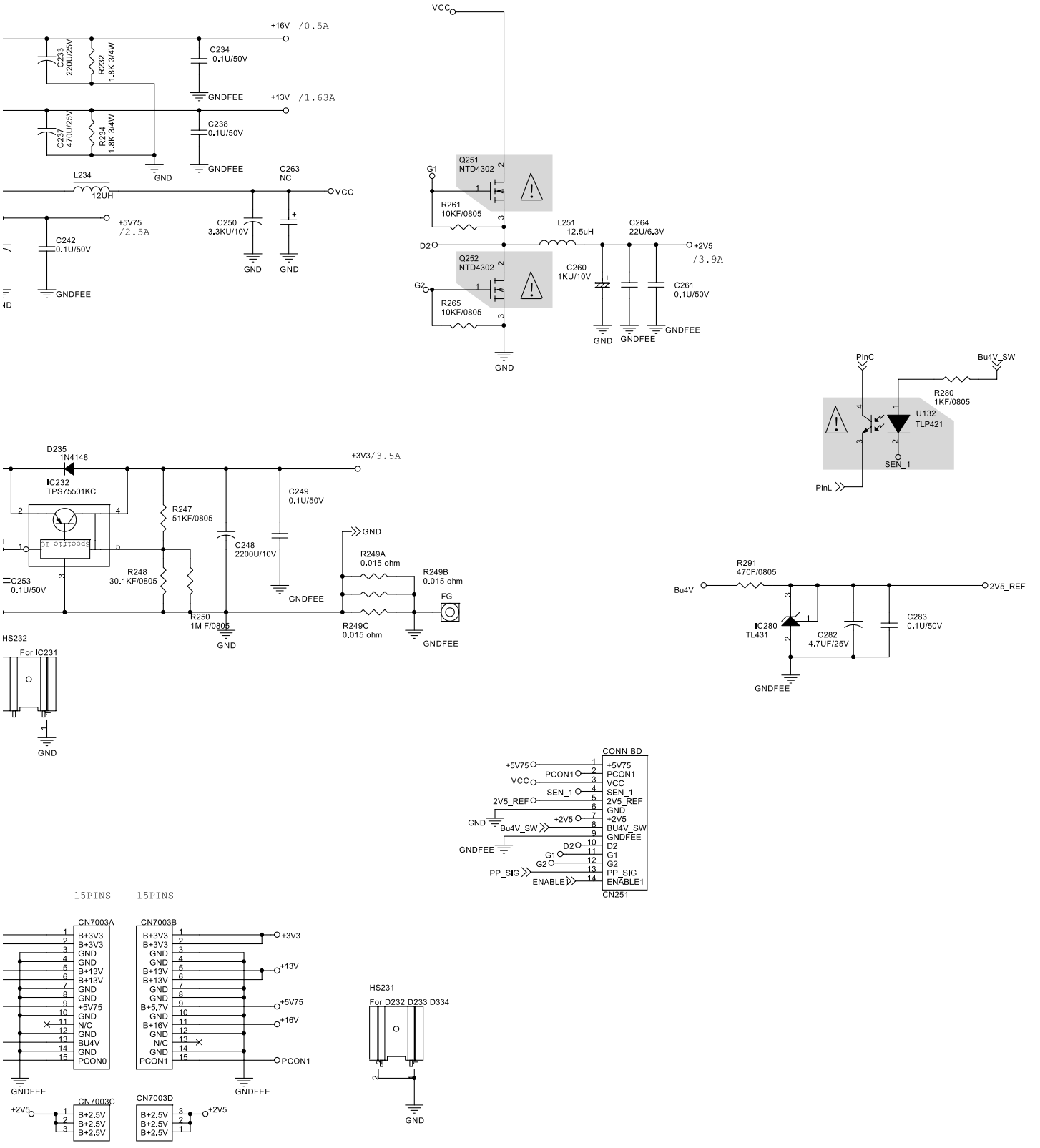
■POWER UNIT / STROMVERSORGUNGSEINHEIT-1/2





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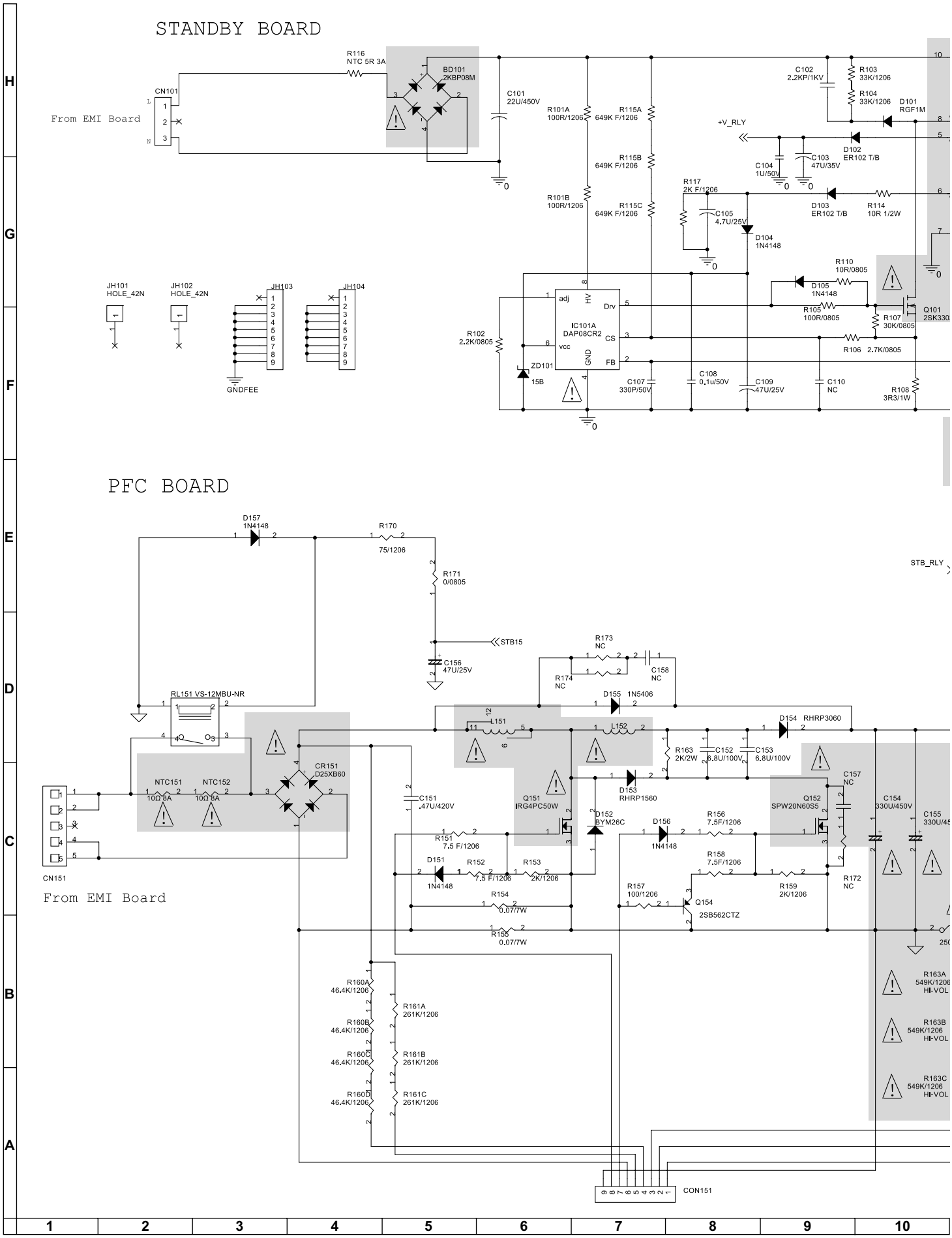
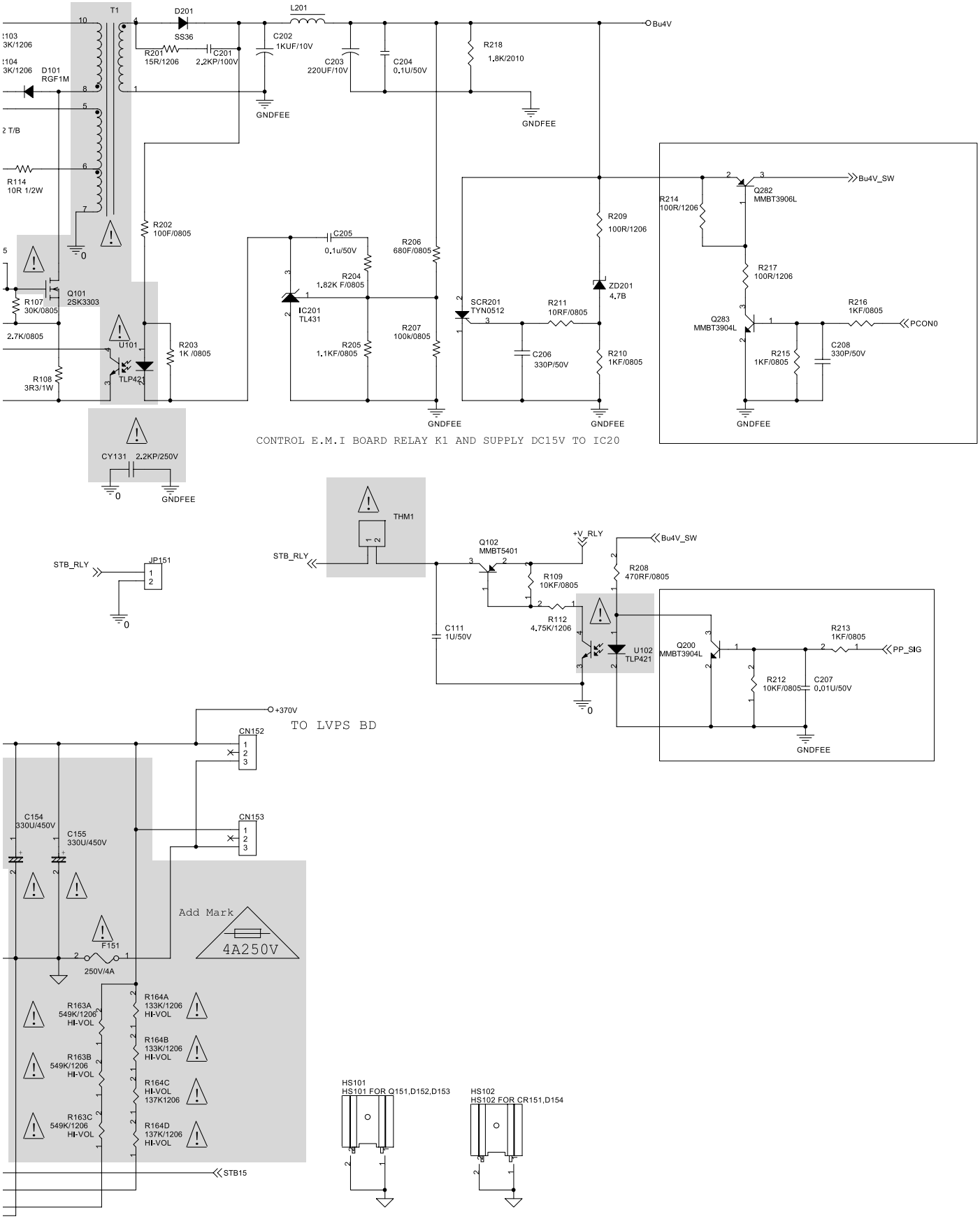
■POWER UNIT / STROMVERSORGUNGSEINHEIT-2/2





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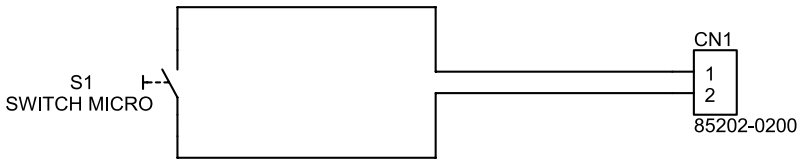
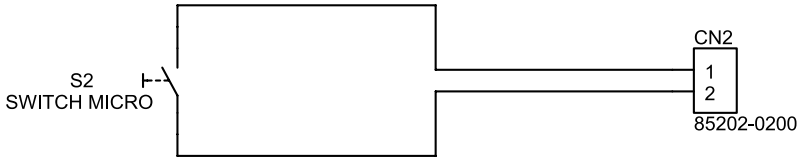
■LAMP DETECTION SWITCH UNIT / LAMPENAUSWERTESCHALTUNGS-EINHEIT

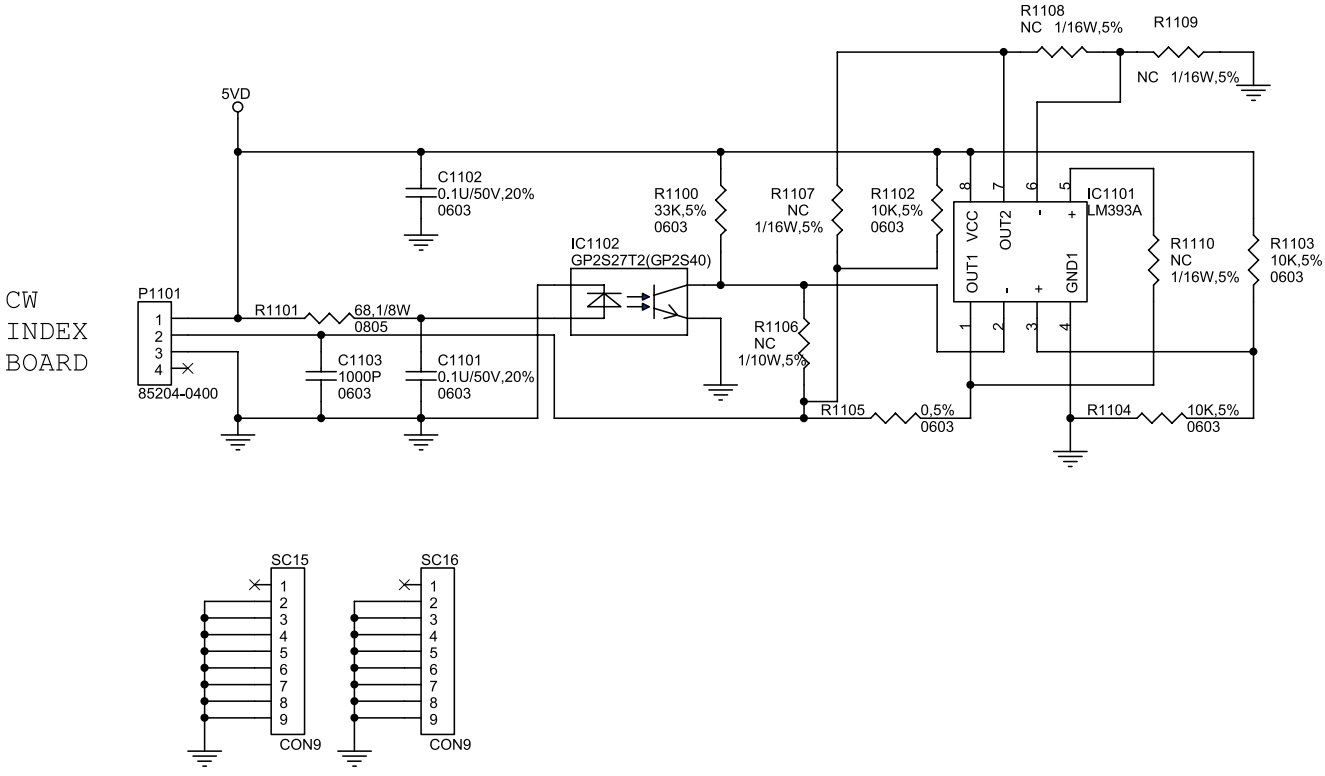


CN1 PS125020-R----->PS125021-R

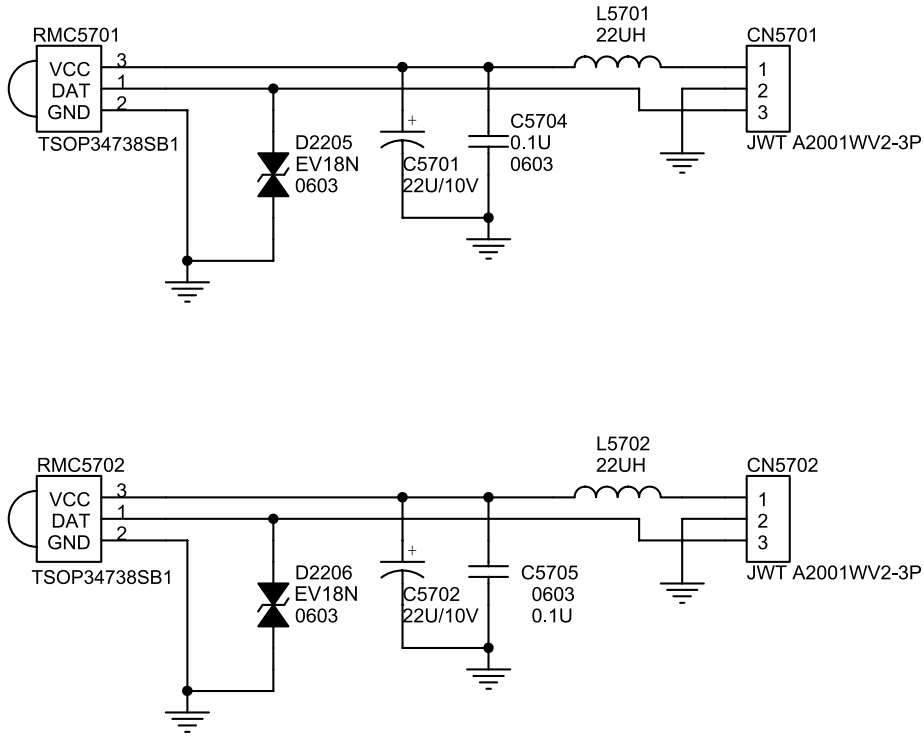


CN2 PS125020-R----->PS125021-R

■INDEX UNIT / INDEXEINHEIT



■IR FRONT/REAR UNIT / VORDERE/HINTERE IR-EINHEIT



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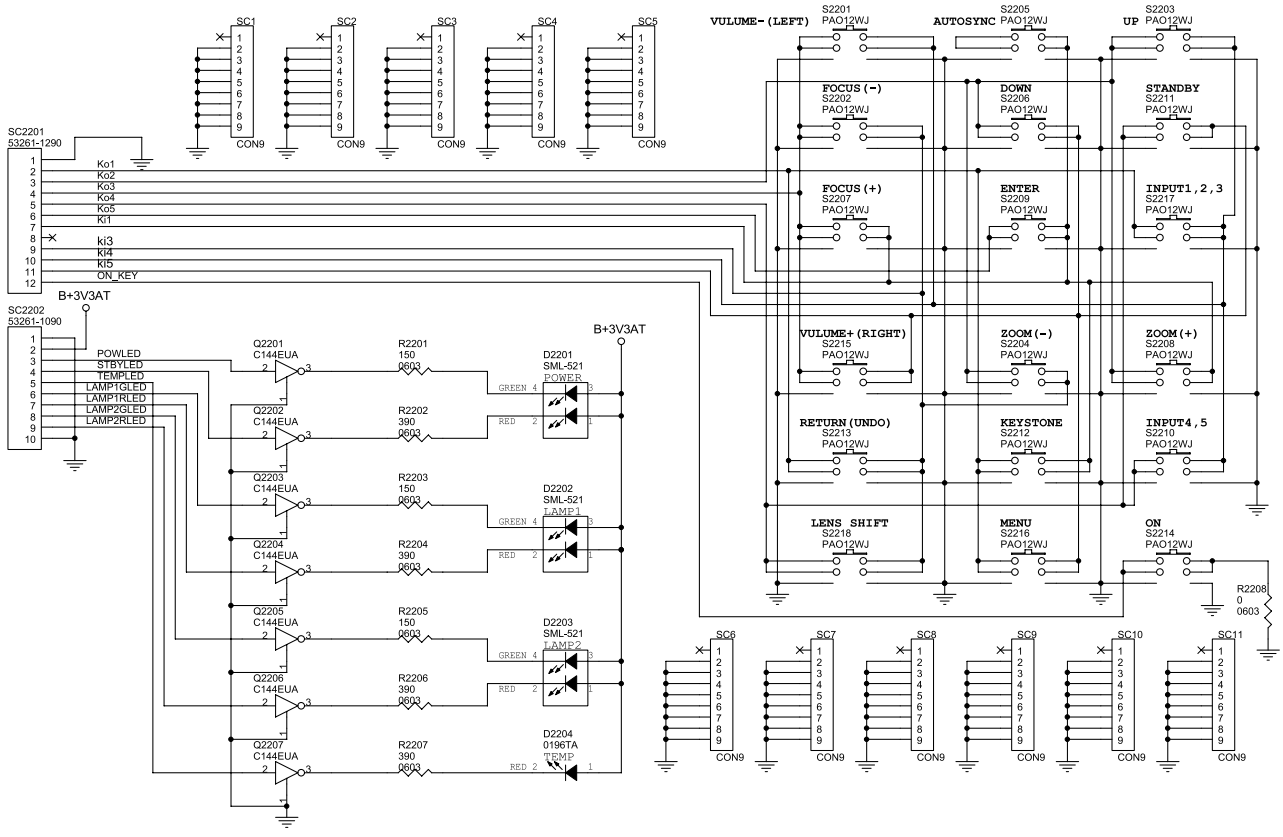

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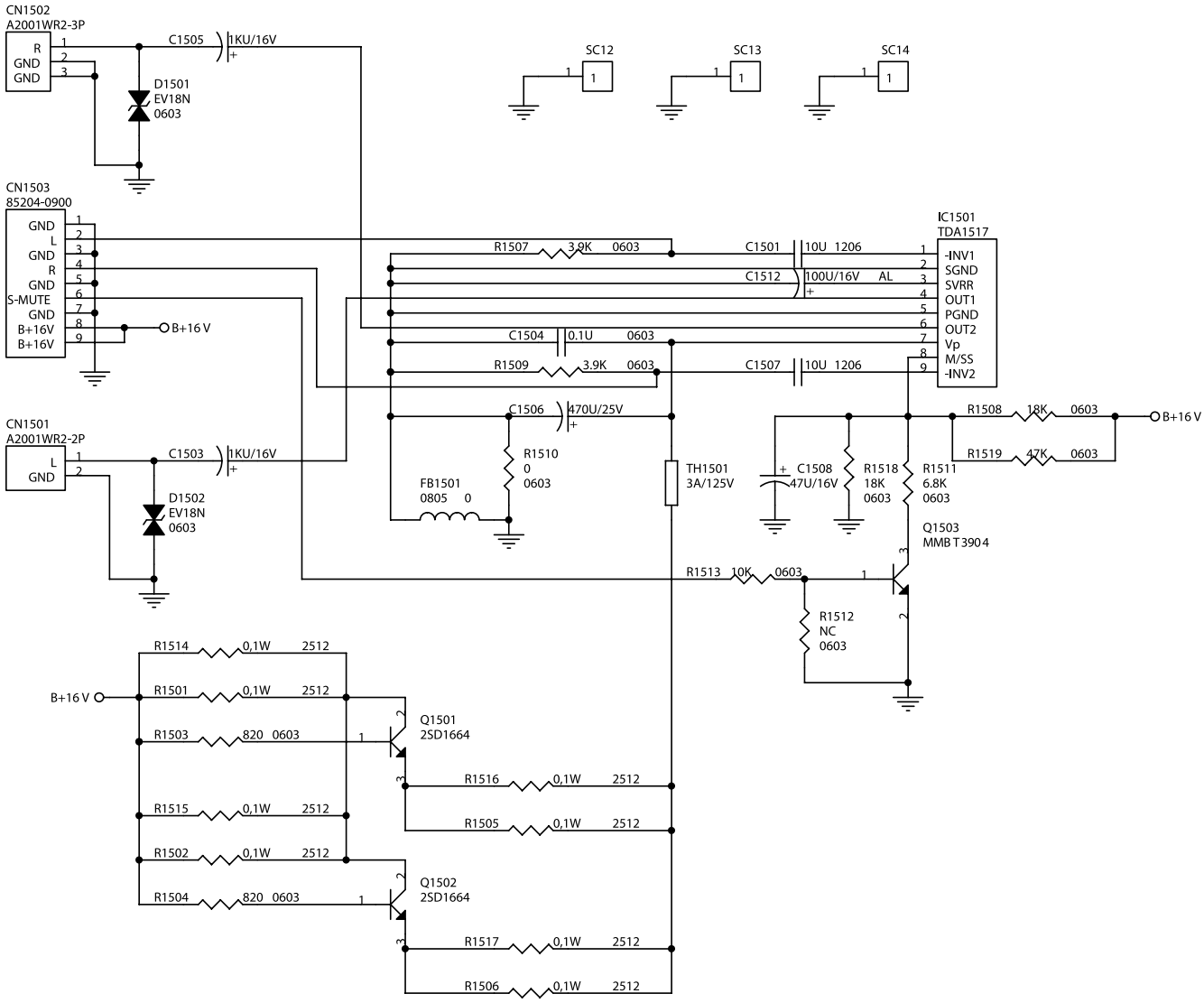

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